American Livestock Journal

FOUNDED AS BREEDER'S GAZETTE IN 1881

OCTOBER 1961

MEAT HOG GOES TO TOWN

YOU CAN PRODUCE THRIFTY PIGS

OUTLOOK FOR MEAT-MAKING

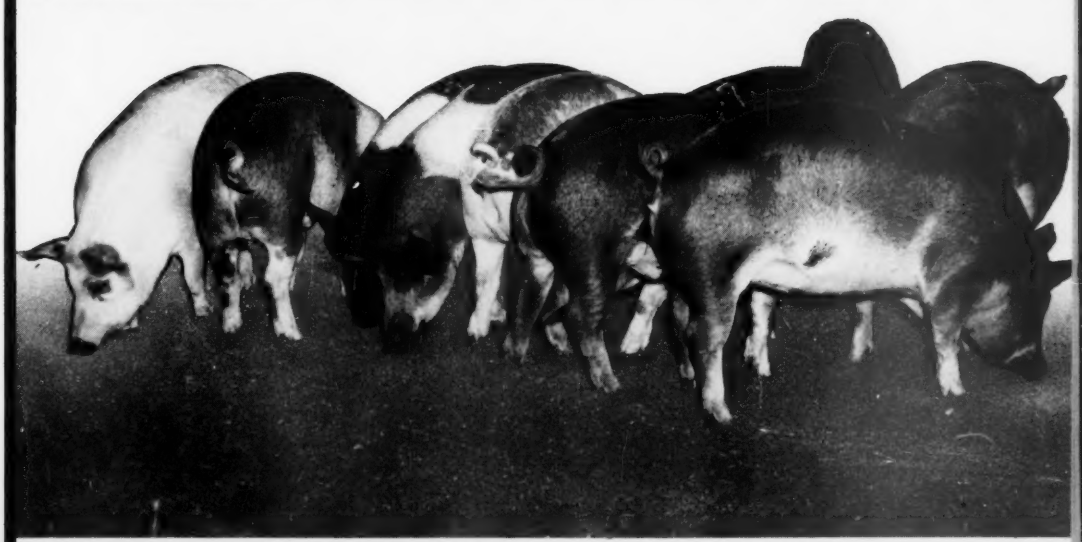
DO YOUR HOGS PAY DIVIDENDS?

IN CASE OF FALLOUT

AUDITED PAID CIRCULATION ABC

GRAND CHAMPION BARROW

GRAND CHAMPION TRUCKLOAD



SUPREME MEAT-TYPES AT 1961 NATIONAL BARROW SHOW

American Livestock Journal

FOUNDED AS
BREEDER'S GAZETTE
IN 1881

OCTOBER
1961
Volume 126
Number 10
2795

CONTENTS

6 Markets Digest
7 Essential Trace Minerals
8 Cattle and Sheep Bloat
10 Meat Hog Goes To Town
13 You Can Produce Thrifty Pigs
14 Outlook For Meat-Making
16 Do Your Hogs Pay Dividends
20 A Quick Review of Vital Topics
22 Unusual Cattlemen's Meeting
23 In Case of Fallout
26 Is Quality Milk Fairly Priced
28 What's News
34 Sam Guard's Roundup

PUBLISHER Breeders Gazette Publishing Company
EDITOR Samuel R. Guard
ADVERTISING MANAGER Bill McKee
CIRCULATION MANAGER George Eliadis

EDITORIAL OFFICES 220 Livestock Exchange, Louisville 6, Ky.
BUSINESS OFFICES 200 South 7th St., Columbia, Missouri
ADVERTISING OFFICE 200 South 7th St., Columbia, Missouri
CIRCULATION OFFICE 200 South 7th St., Columbia, Missouri

LIVESTOCK FIELDMEN

Vaughn Lipp — Box 125, Ossian, Ind.—Phone 265
James Malloy — Parnell, Iowa—Phone MR 8-2009
Glenn Westfall — Halfway, Mo.—Phone Halfway Exchange

ADVERTISING OFFICES

Chicago — Richard Jones, 333 North Michigan Ave. Chicago 1, Ill.—Phone CEntral 6-2828
New York — Bill Shannon, 28 West 44th Street New York 36, N. Y.—Phone LOngacre 3-1750
Atlanta — Campbell Irving, 1801 Peachtree St., N.E. Atlanta 9, Ga.—Phone TRinity 2-8002
Detroit — Charles Sheppard, Penobscot Building Detroit 26, Mich.—Phone WOodward 2-3080
Cleveland — Fred Fey, 339 Citizens Building Cleveland 14, Ohio—Phone CHerry 1-2029
Los Angeles — The Eschen Co., 3142 Wilshire Blvd. Los Angeles 5, Calif.—Phone DUnkirk 2-8391
San Francisco — The Eschen Co., 57 Post St. San Francisco 4, Calif.—Phone SUtter 1-7440

Send Your Renewal, New Subscription or Change of Address to AMERICAN LIVESTOCK JOURNAL 200 South Seventh Street Columbia, Missouri
Our subscription rates are 5 years for $3; 3 years for $2; 1 year for $1.

Entered as second-class matter at the Post Office at Columbia, Missouri, under Act of March 3, 1789. Title "Breeders Gazette," Registered U. S. Patent Office. Published monthly and all rights reserved by BREEDERS GAZETTE PUBLISHING COMPANY 200 South Seventh Street Columbia, Missouri

NEW FARM interphone

- Stretches your time
- Gives you tighter control of your operation

Farm Interphone ties your whole farming operation together. It's a new system that gives you both regular telephone service and intercom from strategically located points around your farmstead. With it you can talk and hear over a wide area without taking a step or interrupting your work. Your wife can handle calls and discuss them with you without running to the buildings. Interphone helps you run things more smoothly—accomplish more every day.

Saves trips between house and farm buildings

Suppose your wife has an outside call and needs to discuss it with you. She can "hold" the call, "broadcast" to you, get your reply, then complete the outside conversation. Or you can take over the call in the barn, if you wish.

Talk "hands-free" right where you are

When your wife calls you on the intercom you can answer without picking up the phone, without interrupting your work. A very helpful feature around the farm. Or, if you want privacy, pick up the phone and talk directly to her.

Hear that ring?

When you prefer, your telephone ring is broadcast over the outside speaker and speakers at other Interphone stations. You don't miss important calls when you're away from the house or the farm buildings. Answer on any phone.

If you'd like to know more about Farm Interphone and what it can do for you, just call your local Bell Telephone Manager—or ask your telephone man when he is in the neighborhood—or mail the coupon below. There's no obligation on your part, of course.

Mail this coupon to:

American Telephone and Telegraph Company
Farm Interphone Division, Room 513A, Dept. 3
195 Broadway, New York 7, New York

I would like complete information on Farm Interphone.

Name_____

Home Address_____

City_____ Zone____ State_____

Telephone Number_____

BELL TELEPHONE SYSTEM

MAKE YOUR MARK

WITH

All-Weather PAINT-STIK

(LIVESTOCK MARKER)

Here's the slickest, surest, safest way to identify cattle, swine, sheep . . . all farm animals. Use it like a pencil. Marks stay on through rain, sun, snow, wind, cold . . . yet are completely removed in the scouring process. Absolutely safe—can't harm animals or hides. Used by county agents, animal husbandmen, U. S. Livestock Extension Service, veterinarians, breeders, growers, commission men, stockyards—during inoculations, reactor tests, auctions, culling, shearing, disease control, etc.

Available in black, white and five vivid colors. See your supplier, or write to:

THE LAKE CHEMICAL CO.

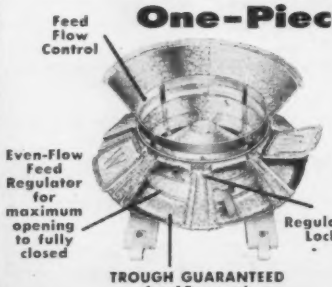
3095 WEST CARROLL AVENUE, CHICAGO 12, ILL.

Announcing the newest of the new!

WARNER

SPUN-LINE ROUND HOG FEEDER

with **Spun-Galvanized Steel One-Piece Trough**


Feed Flow Control
Even-Flow Feed Regulator for maximum opening to fully closed
Regulator Lock
TROUGH GUARANTEED for 15 years!

WARNER BROODER CORP.
North Manchester, Indiana

Please send me complete information on your new Spun-Line Round Hog Feeder.

NAME

ADDRESS

CITY STATE

RECOVERY

Good feeding minimizes disease, directly and indirectly. The importance of nutrition to the maintenance of productive health has been emphasized by the antibiotics, vitamins, and other feed additives. Their use has resulted in greater feed consumption, faster growth, and more efficient feed conversion.

Most feeding trials are conducted under conditions of minimum stress and in the absence of disease. This means that nutritional standards are set up for normal animals and too little is known of actual requirements under commercial conditions.

The hormones of the adrenal cortex are produced and utilized in greater amount during the early stages of stress. These hormones exert their influence at the cellular level, creating a demand for such water soluble vitamins as pantothenic acid; riboflavin, thiamine, pyridoxine, B_{12}, choline, and ascorbic acid; for fat soluble vitamins A, E, and K; for the amino acid methionine and probably others; for certain minerals and electrolytes, especially sodium and potassium; and for other factors still to be identified by scientists.

Since feed intake is reduced during periods of disease and other stress, the increased demands can only be met by utilizing the reserves. Because most of the nutrients enumerated can be stored only in very limited quantities, the reserves are soon depleted to a point where symptoms of deficiency become evident.

RED NO

■ STOCKMEN NEED TO BE on the lookout for red nose, an acute disease of cattle that is characterized by symptoms that resemble shipping fever.

While the disease occurs most frequently in feedlot cattle, it also affects all other cattle, according to Dr. E. Crosby Howe, Extension animal hygienist at the University of Nebraska. The onset of red nose is sudden and progresses quite rapidly through the herd so that usually 80 to 90 per cent of the herd shows some degree of infection.

"Infected animals show lack of appetite, drowsiness, difficult and rapid breathing, and rapid loss of weight through dehydration. In typical cases, the muzzle will be bright red due to hemorrhages under the

ROM STRESS

Scouring or diarrhea hastens the depletion, since water may be lost at 40 times the normal rate, carrying with it great quantities of the soluble nutrients—particularly sodium and potassium, and the critical constituent of protein, nitrogen.

Careful management, which reduces exposure to unfavorable conditions and diseases, can greatly improve the reputation of a feed. Personal attention to and early correction of management irregularities are highly important. They spell the difference between a student of animal physiology and behavior and an engineer operating mechanical and automated gadgets.

Stress, which is more correctly called the "general adaptation syndrome," is exerted through an almost limitless variety of stressor stimuli. The response to the first stage of the non-specific stress phenomenon (the alarm reaction) is an imbalance in the pituitary-adrenal system, and it always leads to acceleration of the physiologic processes of every cell in every organ, gland, muscle, and tissue of the body.

Diseases cannot be "cured" to recover losses. They can only be "controlled" to prevent or reduce these losses and to let nature repair the damage already done.—**Dr. R. C. Klussendorf, Terre Haute, Ind. (He was formerly secretary of the American Veterinary Medical Association and is now director of Veterinary Medical Services for Commercial Solvents Corporation.)**

SE VIRUS

surface skin. This skin later becomes dark," Dr. Howe explains.

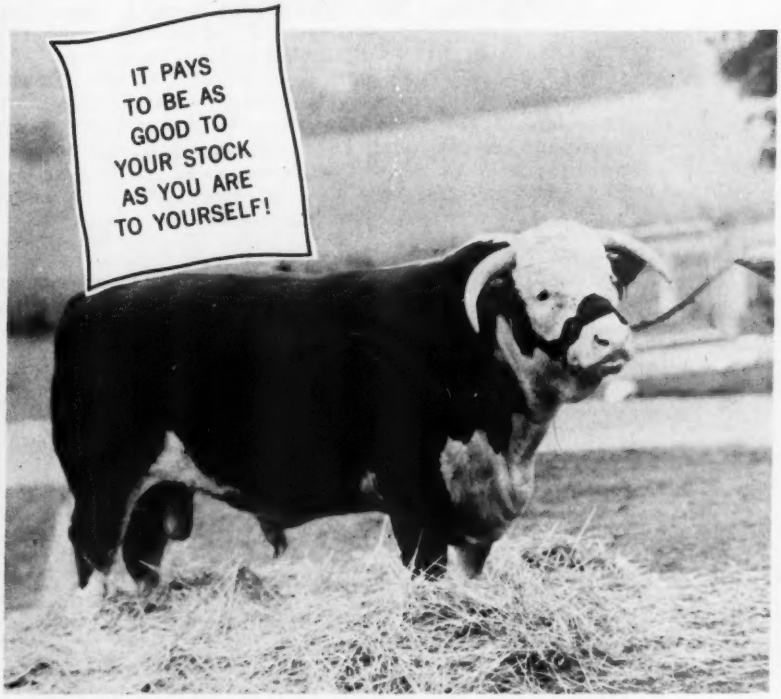
"The discharge from the nose and eyes is clear and stringy, later becoming cloudy and yellowed with pus. The discharge from the nose also may be tinged with blood due to tiny hemorrhages in the mucous membrane lining in the nose and windpipe."

"Red nose is caused by virus. There is no specific treatment, but it can be prevented through vaccination. Your veterinarian can suggest the best nursing and supportive treatment for infected animals in your particular farm or feedlot conditions. The cost of this service will be returned many times over," Dr. Howe points out.◀

When animal skin is injured, reach for soothing

'Vaseline' Petroleum Jelly

—works better two ways to help skin heal



1. Protects wounds from impurities, insects, dirt and foreign bodies... helps to keep open wounds clean.

2. Speeds up healing process by protecting delicate tissues from drying out.

Veterinarian-approved for these uses:

Artificial Insemination
Injured Udders
Dehorning
Barbed Wire Cuts
Open Scrapes
Open Insect Bites
Weeping Eczema
Non-infected Wounds
Burns

Get economical 1 lb. jar

Protect your animals... protect your pocketbook with 'Vaseline' Petroleum Jelly

FREE! "FIRST AID FOR FARM ANIMALS," a valuable leaflet, prepared with the aid of two leading veterinarians, tells you just what to do until the vet arrives!

Write to: **'Vaseline' Petroleum Jelly, Box 3C, Mount Vernon 10, New York.**

VASELINE IS A REGISTERED TRADEMARK OF CHESEBROUGH-POND'S INC.

MARKETS DIGEST

Net Stock-Farm Income Up Some

FAVORABLE GROWING WEATHER has boosted prospects for record-high per acre yields for corn, grain sorghums, and soybeans. At 60.4 bushels per acre, corn yield is nearly 6 bushels above the previous 1960 record. At 44 bushels per acre, grain sorghums are more than 4 bushels above the 1960 record. And at 26.6 bushels per acre, the soybean yield tops the previous 1958 high by 2.4 bushels.

FARM INCOME—For the first 8 months of 1961, the volume of farm marketings and farmers' prices exceed year-ago levels; cash receipts were almost 2½ per cent higher, according to Economic Research of U.S.D.A. Through the first half of the year, realized net farm income (gross income less production expenses) was up about 10 per cent from a year earlier and for all of 1961, realized net farm income is expected to be well above the $11.7 billion of 1960. Main factors: An increase in cash receipts from marketings and larger Government payments under the new agricultural programs.

CONTINUED STRENGTH IN THE HOG MARKET not only has kept prices above year earlier levels, but has also provided a basically steady market for the entire summer, Purdue's Paul Mitchell observes. Average prices of barrows and gilts at terminal markets have been near the $18.50 mark for the entire period. Doubt exists as to the market's ability to hold this price level in coming weeks, as larger marketings are in prospect.

LIGHTER MARKETINGS OF SLAUGHTER CATTLE permitted some grades to gain as much as 50¢ per cwt. But as volume picked up it became difficult to hold the price gains. Top prices on prime cattle advanced to $26 at Chicago. Price spreads between grades continue their extremely narrow range. Fat cattle prices appear to have made their high for this fall. Up until 1958 it was usual to expect the peak sometime in August or September. Price movements of the last 60 days suggest a partial return to the old pattern. Slaughter supplies look big for the November-December period and prices may prove disappointing.

FEEDER CATTLE PRICES continue to be bolstered by a strong demand arising chiefly from excellent wheat pasture prospects in the Southern Great Plains and by continued relatively favorable feeding ratios. That is, 100 pounds of fed steer will pay for about 22 bushels of corn. This compares with about an 18 to 1 ratio of a decade ago, and about 15 to 1 ratio in the prewar period. Grade for grade, feeder cattle are selling from $3 to as much as $6 per cwt. above slaughter cattle. Your editor went to a graded feeder calf auction at the Louisville Yards, where 3,291 steers and heifers averaging 543 pounds sold for an average of $23 a cwt. in 4 hours. Top was $26.60 for 350-pounders. Graded feeder calf sales across the country have been good, very good, reflecting high faith in the future of beef. There is a definite trend for farmers in the Midwest, Southeast and Atlantic areas to produce feeder calves off the teat. With all this corn, many will go ahead and feed them out.

LAMB PRICES have strengthened about 50¢ on top grades, bringing Prime lamb quotations back to the $19 level at Chicago, although the bulk of the lambs marketed has been selling in the $16-$18 range. This is about at the same level as a year ago. However, feeder lambs are quoted generally about $2 per cwt. below last year's levels. Part of the cause for this results from the generally unprofitable lamb feeding enterprises of the past year, Paul Mitchell says. Sound-mouthed, western stock ewes are a bargain.

OPENING PRICES ON WOOL in the 1961-62 Australian and South African wool auctions were about the same as those at the end of the 1960-61 season. Demand was relatively strong. Prices are expected to hold at about current levels for the next two months. The Secretary of Agriculture has asked sheep societies and wool growers for guidance in setting the next support price on wool in accordance with the National Wool Act which Congress extended for 4 more years. It is now 62¢ a pound guaranteed.

DOWNTREND IN MILK COWS slowed noticeably again this year as it did in 1960. Main reasons: Steadily improving milk price relative to feed prices and, to some extent, lower prices for beef cattle. In 1960, the decline was 350 thousand head; this year, 150 thousand head. But milk production is up 1 per cent.

ESSENTIAL TRACE MINERALS

■ THE EVER-INCREASING IMPORTANCE of mineral supplements in modern livestock operations is stressed by Dr. Gustav Bohstedt, Emeritus Professor of Animal Husbandry, University of Wisconsin.

Dr. Bohstedt listed five major reasons why mineral supplements are more and more necessary to efficient livestock production:

► 1. Mineral content of feed crops is lowered by losses due to erosion and long-continued cropping during generations of land use.

► 2. Nitrogen - phosphorous - potash fertilization, while increasing yields, has tended to lower the proportion of essential minerals in feed crops.

► 3. Breeding for rate of growth, fattening and milk, egg or wool production has set up keener mineral demands.

► 4. Hormones, antibiotics and other growth and production stimulants have accentuated mineral requirements.

► 5. Greater use of naturally low-mineral oilmeals and mill feeds in place of tankage, meat scrap, fishmeal and skim milk, have made many supplementary minerals more necessary for "critical" animals on the farm—pigs, poultry and young calves.

"To meet these increased demands for minerals and avoid abject losses as well as costly but subclinical losses, not only the common minerals such as calcium, phosphorous and salt must be accessible in adequate quantities but the trace or minor minerals too.

"Among the major minerals," Dr. Bohstedt said, "salt is not merely an appetizer but is involved in the vital processes of respiration, digestion and blood circulation. The fact that the blood contains more salt than all other minerals combined is evidence of its importance."

"Calcium and phosphorus" Dr. Bohstedt told the group, "are associated with bone growth, but calcium plays a part in every heart beat, and phosphorus takes part in the release of energy in muscle tissue.

"Iodine, one of the first trace minerals identified as essential, is used by the thyroid gland for the production of thyroxine, and prevention of goiter or 'big neck.'

"Manganese, appreciated for its part in reproduction, milk production and egg hatchability, is also vital to bone growth and other body functions.

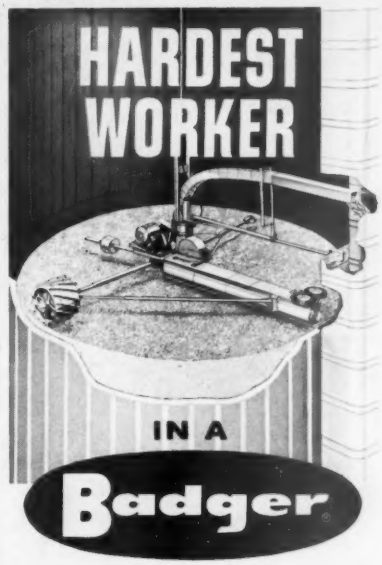
"Copper, too, is associated with reproduction and with blood formation. Both copper and iron are constituents or activators of enzymes which further extend their functions in the body."

"Cobalt, used by ruminants to synthesize vitamin B-12, has provided remarkable results with deficient and literally dying sheep when supplied at the rate of 1 ounce cobalt sulfate per 100 pounds of salt."

"The latest to join the array of trace minerals is zinc which is especially needed in growth and in the development of skin and hair. Zinc is found in rather large amounts in the skin. Its most dramatic effect has been in the prevention and cure of parakeratosis in swine."

Because salt is universally needed for supplementing rations many, if not most mineral-wise stockmen use their salting programs to do the double duty of supplying the vital trace minerals listed here—iodine, cobalt, manganese, copper, iron and zinc.◄

YOU SELDOM SEE THE



MECHANIZED FEEDLOT

. . . another reason why more farmers buy Badger Silo Unloaders than ANY other

Up in the silo — where you want to climb as seldom as possible—you'll find the key tool in thousands of Badger-equipped feeding systems. One look at a Badger silo unloader tells you here's QUALITY — from the rugged 9-in. auger to the bonded-and-baked-on enamel finish. Any time, any weather, any silage, a Badger will deliver better feed than the same silage would be removed any other way — fluffed up, mixed, conditioned the way cows like it. There's a size for every silo 10 to 30 feet, capacity-matched to 3 types of quality Badger bunk feeders that let you have full automation now or anytime in the future.

BADGER NORTHLAND, INC.
Dept. B — Kaukauna, Wisconsin

Please send literature on the following:

☐ Tube Feeder ☐ Silo Unloader
☐ Auger Feeder ☐ Feedlot Layout

Name..... Student ☐

Address.....

City & State.....

Dealerships available in some areas. Write for details.

FARNAM EASY HOLD
CHUTE GATE
PORTABLE OR PERMANENT Installation In Any Opening!

Enables you to quickly restrain and safely hold animals for inspection, treatment, dehorning, vaccination, ear marking, etc. Makes cattle handling easier, safer, faster. Every stock farm needs and should have this low-cost stock-holding gate.

Accept This "FREE TRIAL" OFFER
Try this Gate at our risk! Write for Illustrated Literature and "30-Day Trial Plan"

FARNAM EQUIP. CO. Dept. CG-4 [illegible] OMAHA, NEBR.

VACCINATE and BE SAFE!

THE PEAK OF QUALITY
COLORADO
Veterinary biologicals
Dependable Protection!
COLORADO brand Serums and Biologicals have a trouble-free record for over a quarter century in controlling livestock diseases. Produced under Government supervision.
VACCINES and SERUMS
for Cattle, Swine, Horses, Sheep, Turkeys
Local Dealers Nation Wide Distribution
SEND NOW FOR FREE CATALOG
COLORADO SERUM CO.
4950 YORK STREET • DENVER 16 COLO.

Your guide to bigger profits . . .

forecasts prices, production trends, feed costs, farrowing rates

Doane marketing experts combine research and careful appraisals to predict what's ahead for hog raisers. The new Doane Fall Hog Outlook may help you make hundreds of extra dollars from your present hog operation. It's loaded with valuable information.

SEND 25¢ FOR SPECIAL REPORT . . . To acquaint you with the DOANE AGRICULTURAL DIGEST, the Doane editors will send you a copy of the new Fall Hog Outlook, plus a group of latest DIGEST Reports, all for 25¢. Offer expires November 30, 1961, so clip coupon and mail it today . . . you'll be glad you did!

DOANE AGRICULTURAL SERVICE
Box 7119, 5142 Delmar Blvd.
St. Louis 8, Missouri

Here's my 25¢ . . . send me the Fall Hog Outlook and latest group of Doane Agricultural Digest Reports.

NAME _____

RFD or STREET _____

CITY _____ STATE _____

Cattle and Sheep BLOAT

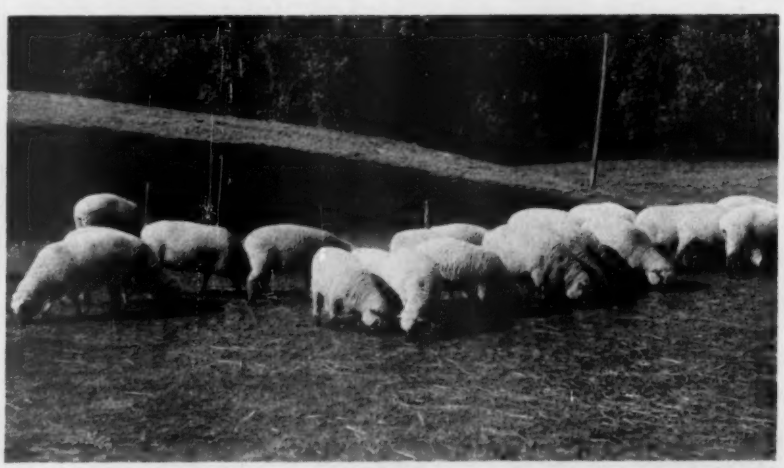
■ HOW SERIOUS IS the problem of cattle and sheep bloat in this country—what causes it, and what is being done to control it? A total annual loss to farmers of more than $40,000,000 is probably a conservative estimate, because it does not take into account the production losses from animals that are afflicted but recover. Research has revealed legume pasture as one of the main sources of the distress, and studies are in progress to discover other facts about the ailment that may help to control it. A Federal research appropriation made several years ago has stimulated and expanded the work being done and made it possible to coordinate the efforts of the various research groups throughout the country.

Two areas of research—the process of normal eructation and the consequences of abnormal eructation—have been especially productive. Since inefficient eructation is commonly considered the immediate cause of bloat, thorough physiological studies of this mechanism were carried out. It was found that eructation is apparently stimulated when the rumen and the reticulum are stretched with gas. Eructation is an active process that may be described briefly as follows: the cardia (entrance of the esophagus into the rumen) is cleared of food, rumen gas is pushed forward into the reticulum and, by a series of muscle relaxations, it enters and is trapped in the esophagus, from which it is expelled into the pharynx by contractions of the esophagus wall.

Gas Enters Lungs

► During normal, as well as forced, eructation, some unusual physiological events occur as the rumen gas is expelled from the esophagus. Gas is prevented from going out through the nostrils by the closure of a strong ring of muscle. The mouth remains more or less closed, and the glottis (the opening to the larynx and trachea) remains open. This permits much of the eructated gas to enter the lungs, were certain components of the gas are absorbed into the blood stream.

The full significance of the reabsorption of eructated gas is not known; however, two important findings have come out of this work. One is that a bloated animal reabsorbs rumen gasses by way of the



lungs with each eructation. This has an unfavorable effect on the animal's blood gases at a time when it can least afford such changes.

The other finding, although unrelated to bloat, is that some of the rumen gases that are formed—after eating onions, for example—are absorbed by the lung route and very quickly contaminate the milk. Eructated gases, under certain conditions, have been shown to affect the flavor of milk.

Eructation Inhibited

► Another important finding is that when the receptors around the cardia are covered with ingesta (food material), eructation is partially or completely inhibited. This is probably why bloated cows, feeding on irrigated pastures, sometimes stand with their hind legs in the ditch and their front legs on the side of the ditch. This position may aid in establishing more efficient eructation.

Because the foaming of ingesta may also be a contributory cause of bloat, intensive though still inconclusive research on this subject has been carried out for several years. The role of saponins as toxic agents in legumes that may cause foaming has been explored. Likewise the possibility that rumen bacteria may have a part in producing agents that cause this condition has been examined. Study of these and other possibilities must continue, however, before the cause is definitey known.

Antibiotics such as penicillin, given by mouth, prevent bloat for 2 to 3 days and do not seem to interfere with milk production. Too frequent doses, however, may cause resistant bacterial strains to develop in the rumen, thus reducing the effectiveness of the antibiotics.

One of the most effective and practical methods of bloat control now available is spraying pastures with an emulsion of vegetable oils or animal fats at the rate of 2 to 6 ounces of oil or fat per cow per day. Spraying must be done every 24 hours for the best protection. Crude soybean oil fed with alfalfa silage at the rate of .25 pound per 100 pounds of body weight has prevented bloat. Tallow fed at the rate of .06 pound per day has prevented bloat under experimental conditions. The oils and fats prevent foaming of ingesta and are also digestible.

In general, considerable progress has been made in knowledge of the causes and prevention of bloat, but much remains to be learned. If the next decade is as productive as the past one, the problem of bloat should be well under control. ◄

$25.00 AND MORE PER ACRE

Range pastures make profitable beef gains

Results from U.S. Department of Agriculture experiments have proved that good ranges can mean sure profits for beef ranchers. What they have done, you can do too.

Reseeded native sand lovegrass on the Southern Plains Experimental Range at Woodward, Oklahoma, has produced more than 117 pounds of beef per acre in one grazing year. The gain was 403.9 pounds per head. Reseeded range produced 78.6 pounds more beef per acre than untreated land.

Beef gains per ranch were nearly tripled without investment in a single acre of additional range. Dollar returns were extra good—more than $25 per acre, figuring beef at 22 cents per pound. Reseeding expenses were paid back in less than one grazing season. Land taxes and interest were low.

Reseeding and good range management go together like Red Brand® fence and Red Top® steel posts. They make the combination that's sure to increase ranch incomes. The zinc coating on Red Brand fencing is fused right into the wire to resist rust and add years of low-cost service.

RED BRAND

KEYSTONE STEEL & WIRE COMPANY Peoria, Illinois

Red Brand Fence • Red Brand Barbed Wire • Red Top Steel Fence Posts • Non-Climbable Fence • Keyline® Poultry Netting • Keystone Baler Wire • Nails • Staples

MEAT HOG

Grand champion barrow of them all was this lightweight Duroc of Henry Hamer, Ft. Atkinson, Wis., Hoard's Dairyman town.

That's the reason American livestock farmers are producing meat-type hogs of every breed—to send them to town to get front place on the meat counter.

In 15 years the National Barrow Show at Austin, Minn., has converted the ideal type of farm hog from lard to red meat. Sponsors of the world's greatest hog show are: National Association of Swine Records (Berks, Chesters, Durocs, Hamps, Landrace, Polands, Spots, Tams and Yorks), Geo. A. Hormel & Co., Austin Chamber of Commerce, Mower County Agr. Society in cooperation with the University of Minnesota and Iowa State.

This year a 205-lb. Duroc of Henry Hamer's in Jefferson Co., Wis., was the grand champion barrow. Reserve was James Maahs' 210-lb. Hampshire from Lancaster Co., Neb., shown by Jim's daddy, Everett Maahs.

The grand champion truckload (10 head) was an elegant bunch of 223-lb. crossbreds from the farm of Mr. and Mrs. Robert Greene in Washington Co., Iowa. As usual, Bob had to stay home to look after things on the farm, so his wife showed their pigs. If there was an award for showmanship at Austin, she would have won that, too. I first met Connie Greene at the Louisville Barrow Show where she showed the grand champion in the carcass contest. Her champion truckload at Austin were out of crossbred Yorkshire-Poland sows and sired by Duroc boars.

Mrs. Robert Greene with the 10 crossbred market hogs, sired by a Duroc boar and out of Hampshire-Poland crossbred sows, which were named the Grand Champion Truckload at the 1961 National Barrow Show.

GOES TO TOWN

by Samuel R. Guard

Thirty truckloads of crossbreds were shown and they continued to flaunt the power of heterozygosis for producing commercial hogs, when Roy Keppy from Scott Co., Ia., put his Hampshire X Yorkshire-Polands in the reserve champion place. Roy had the grand champion load last year and mighty nearly made it again. He bested Fred Goodchild's load of Hampshires from Palo Alto Co., Ia., which was first among 21 purebred loads. It must have been plain however, that you've got to have good purebreds before you start crossing or criss-crossing.

Bob & Connie Greene put their Landrace-Poland-Hamp pig in the carcass contest. He won that with a 6.15 sq. in. loin under 1.33 in. of backfat, a length of 31 inches and a value on the hoof of $20.21. . . . Next came Bill Urban's Duroc from Whiteside Co., Ill., with a 5.07 sq. in. loineye, 1.33 backfat, 29.1 inches from 1st rib to H-bone; they valued him at $19.94. . . . Ralph Bartlett's Berkshire from Muscatine got a $19.84 per cwt. value, with a 4.87 loineye, 29.3-inch length and 1.2 in. backfat. . . . Top for No. 1's in Austin that day was $18.00.

This is the day of the Certified Meat Hog, they said. Here he is—an inside look that pleases consumer, processor and producer alike.

This pig comes from a prolific sow that will wean 8 or more twice a year. The shote is a fast grower to 200 lbs. well under 180 days, and yields a well-balanced, meaty carcass with just enough fat to make it firm and tasty.

Every barrow in this show must have been farrowed on or after March 1st, 1961. They showed in 3 weight classes—lights (190-210 lbs.), welterweights (210-225 lbs.), mediums (225-240 lbs.). No heavies.

Are your pigs real Meat-type market shotes in less than six months? Well, what does a real Meat hog look like? Maybe I can show you by giving you here a picture of the champion of each breed at the 1961 National Barrow Show.

There were two boar classes and two gilt classes in each breed—senior spring boars and gilts were February pigs, and juniors farrowed on and after March 1st. The prize winning boars and gilts are sold at auction.

Hampshire boars (15) averaged $734, 15 belted gilts, $269. Walsh Bros., Beloit, Wis., paid $2,650 for the top boar. He wasn't the champion either, only 3rd in class. The champ sold for $900.

Among 16 **Chester White** boars, Ed Smith, Little York, Ill., got top price of $1,350, while this champ sold for $900, bringing the average to $512. The 15 Chester gilts made $191 apiece.

In **Durocs** the champion boar got the top price of $2,000, going from Texas to Iowa. The 16 Duroc boars averaged $546, 15 gilts $221.

Top boars in **Spots** was the champ @ $400. 15 Spotted boars averaged $182 and 15 gilts $123.

The top-priced **Tamsworth** breeding hog was a gilt, the champ that went from Minnesota to Texas at $240. Six Tamworth boars averaged $76 and 7 gilts $92.

Berkshire boars averaged $290, gilts $168, the champion boar staying in Wisconsin for $1,000.

Oscar Anderson bought the top **Poland-China** boar for $1,650—the one that had wowed-em in the Hog College. Poland boars averaged $709, gilts $196.

Landrace were well balanced in prices, the boars bringing $168 on the average and the gilts $166. Top boar stood 6th in class, got a high bid of $350. Champion gilt beat that by $50, and the reserve female got $375.

Yorkshire breeders sold 2 boars for $1,100. Champion gilt stayed in Minnesota for $600. York boars average $635 and the gilts $238.

It should be said that the private sales of boars and gilts at the National Barrow Show were consequential in money, and for swine improvement. Supt. Carroll Plager said that in some breeds, not a boar went back home with the original owner. But you see, they have the old boar back home, and they can get more like these young ones.

Oh, yes, you may never believe this, but the aggies from Michigan State beat the ones from the great hog state of Iowa by 10 points to win the college judging contest. They were coached by Harlan Ritchie, who knew his way around Meat hogs, having been high man here a few years back. Prof. Randall Grooms, coach of the Georgia team, brought his lads 1,200 miles in a station wagon to participate. They came out 7th, but learned a lot of geography and quality pork raising and processing which they can take back to Mrs. Herman Eugene Talmadge, who runs the Senator's Georgia ham business.

Iowa State had a refrigerated display truck showing swine improvement on the farm by 20-year periods. The 1940 hog had a loin 10½% of its weight; backfat and fat trim 13%, ham 13½%. The 1960 loin is 11½%, backfat and fat trim 10½%, ham 15%. The 1980 loin will go up to 13%, backfat and fat trim 8%, ham 16%. The typical 1940 hog had

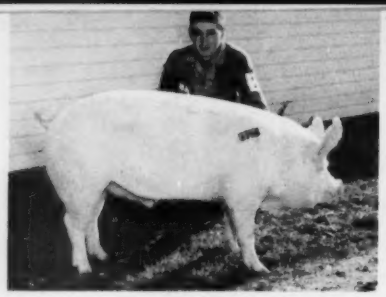
MORE

Meat-Hog Goes to Town ....

an average length of 28½ inches, 1.8-inch backfat and a 3-inch loin eye. The 1960 average hog at the carcass show here had 30-inch length, 1.4 backfat and 4.4 loin eye. The 1980 hog was credited with 31-inch length, 1.1 backfat and 6-inch loin eye.

At the American Meat Institute, Dr. Jim Hillier of Oklahoma went them one better and said farmers could increase their yearly income by $300 million just by producing leaner hogs. He predicted we'll go to less than 200-lb. butcher hogs with no more than an inch of backfat.

Berkshire champion barrow, bred, fitted and shown by Champion Farmer, Milo Wolrab, Mt. Vernon, Iowa.

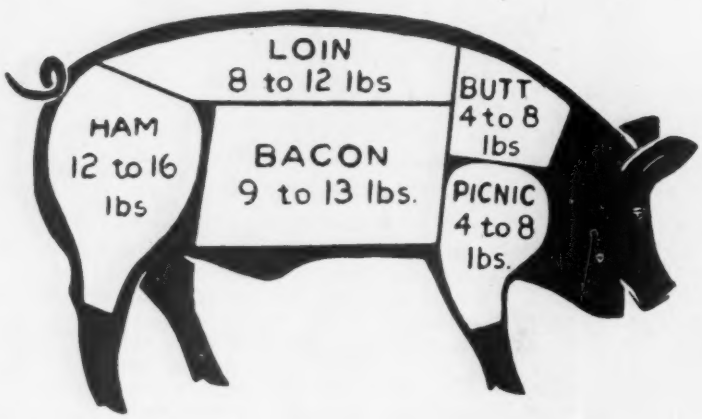


Of 70 Yorkshire barrows shown, Hilman Schroeder, Sauk City, Wis., had the champion.

Charlie Brown, Skidmore, Mo., had the grand champion Landrace barrow (28 shown) on this long, white one.

Young Jim Maahs' champion Hampshire barrow from Lincoln, Neb., proud daddy, Everett, with the show cane to head off 70 others in the ring. This hog was reserve champion barrow of the show.

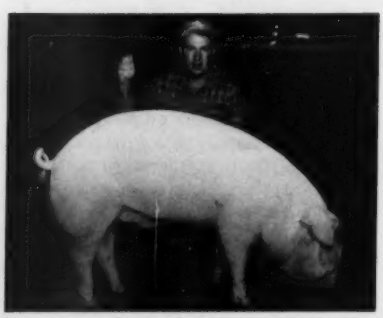
THE ALL-AMERICAN CERTIFIED MEAT HOG



Chester Wiley's son Tom from Washburn, Ill., showed the champion Tamworth barrow.

Champion Spot barrow (46 shown) was Willard Merryman's from Marshalltown, Ia. Later this pig was welterweight champ.

Oscar Anderson himself brought this champion Poland China barrow from Leland, Ill., where hangs a gold medal for Hog Farmer of the Year that we gave him a long time ago.



Chester White champion, among 71, with owner, Harvey Richardson, Elmore City, Okla. Also reserve champion middleweight over-all.

PRODUCTION OF THRIFTY PIGS starts before the sows are bred, Ben Dean, University of Missouri swine researcher, reported at the Spring Livestock Day.

Feeding antibiotics to sows at breeding time boosted size of litters farrowed by 18 per cent and the number of pigs weaned by 25 per cent in a University test. One-half gram of antibiotic was fed per head per day for 10 days to two weeks, beginning three to five days before breeding.

Rations for pregnant sows can be too high in energy, Dean cautioned. But he stressed the need for adequate amounts of protein, vitamins, and minerals.

A gain of 80 to 100 pounds during gestation for gilts in excellent breeding condition gave best results. This gain required about 5 pounds of concentrate per head per day in dry lot; 3½ to 4 lbs. on pasture. Heavier feeding had no significant effect on number of pigs farrowed but it did reduce the number of pigs weaned.

For maximum milk production sows should be put on full feed soon after farrowing. Self-feeding nursing sows has given satisfactory results and eliminated a lot of hand labor. Sows are turned out to self-feeders for one to two hours a day, starting the day after farrowing.

Creep Feed and Water

Providing both creep feed and water for pigs as early as three days after they are farrowed is a good practice. When this is done most pigs will be eating and drinking regularly at a week of age.

Having water available is a key point, Dean said. Pigs will eat more creep ration if they can get a drink, even though they are nursing the sow.

When hogs are on pasture, creeps should be located near the sleeping quarters.

The University specialist prefers crushed corn cobs to straw for bedding in farrowing stalls. Cobs stay drier and remain in place better.

Losses from crowding and crushing may occur when sows and young pigs are first moved to pasture. Often, too many try to crowd into one shed. To avoid these losses, Dean suggested locking the sow and pigs in a one-sow shelter the first night on pasture. After that they will usually consider this shelter their home. In some cases, a little guidance may be needed for a night or two after that.

Where a number of sows are kept in the same shelter, Dean suggested taking only one sow per day to the shelter. That way each sow and her pigs will tend to pick out an area of the shelter as their own.

He told the Livestock Day audience that the herdsman was still the one most important factor in producing thrifty pigs. And he said thrifty, healthy pigs can be produced either on pasture or in confinement.

Advantages From Crossbreeding

► Crossbreeding offers the commercial producer an easy, inexpensive and effective method of improving the performance of his swine herd. Crossbred pigs are superior in many respects to pigs that may have been produced by the same group of parents using a purebred mating system. Crossbred sows have larger litters of more vigorous pigs than the average of the parent lines. This advantage is referred to as hybrid vigor. Crossbred pigs gain faster and the percentage pig crop weaned is usually higher than that of purebreds. Carcass characteristics show a limited amount of hybrid vigor which again points out the necessity for concentrating on meatiness in your selection of breeding animals.

A crossbreeding system must be well-organized and must employ superior parents to obtain the desired results. This system of mating does not develop good genes but, instead, combines good genes in a manner that is effective in improving performance. A three-breed crossing system is suggested. One example of many possibilities on how a three-breed program may be operated is as follows. A first cross is made between efficient, meaty Poland China boar and good Landrace gilts. Replacement gilts would be selected from these crossbred pigs and then bred to a Hampshire boar. Continued selection of replacement gilts would be made from the crossbred pigs produced and purebred boars would be used in the breed order of Poland China-Landrace-Hampshire. This procedure would then take advantage of the superior reproductive performance of crossbred sows.

YOU CAN PRODUCE THRIFTY PIGS

by J. Russell Ives
Director of Marketing
American Meat Institute

OUTLOOK FOR MEAT-MAKING

The cattle cycle doesn't have as much up and down in it as it used to. The cattle industry is considerably more stable than it once was.

Some analysts, including USDA's Charlie Burmeister, think that the range country is nearing its maximum carrying capacity for cattle, and that this will limit beef production. This could be true several decades from now. However, there still are some 50 to 60 million acres of crop land in the rest of the country which could be turned to high-production of forage crops. And in addition, technology for increasing grass production in the South, as well as in the West, certainly has not been exhausted.

The live weight of cattle and calves produced per animal on farms and ranches has increased by about 60% during the past 40 years. For a number of reasons: More calves saved per 100 cows. More calves raised to maturity. Smaller death losses. An increasing proportion of beef cattle. And heavier slaughter weights.

More Mouths to Feed

The projected population line is expected to cross the 200 million mark in 1966. By 1975 we will probably have 230 to 240 million people. For the country to enjoy as much beef and veal as we've been eating, total production will have to rise at a rate of around 350 million pounds per year. After making some allowance for further improvement in productivity per animal, this means adding about one million head a year to the total cattle herd.

The heavy supplies of fed cattle during the early summer have been worked off. Steer and heifer slaughter will not continue as much above last year as they did during May and June. Cow slaughter has run below 1960 during the past 6 months, and this will probably continue for the balance of the year. Despite the severe dry weather in the Northern Plains, there has been no over-all disposition of cattlemen to reduce cow numbers.

Marketings of feeder cattle picked up sharply during August. Despite narrow feeding margins last year, buyers have been optimistic, and prices of feeder cattle and calves are currently $2 to $3 above 1960. The total movement to feedlots will be

as large or a little larger than last year. Consequently, we do not see much change in the total supply of fed cattle for 1962 compared with the current year.

Poultry Invades Pork Markets

Turning to hogs, the long-run outlook is less clear than that for beef. The main reason is that there are some worrisome factors lurking in the background. The demand for pork products has shrunk at an alarming rate since World War II. The pork line of disposable income of consumers has slipped steadily since the war and now stands at about 1.7%, compared with 2.5% for beef.

While we don't know all the reasons for this, they seem to be tied in with the mistaken impression which many people have about the calorie content of pork and the lower status which pork has with some people, as illustrated by its second-rate position on many restaurant menus. At the same time there has been the phenomenal growth in poultry production, which appears to compete much more vigorously with pork than with beef. Per capita consumption of pork from a peak of 80 pounds in 1944 is down to about 63½ pounds this year.

Watch St. Louis Pork Congress

Fortunately, some research on palatability and other factors affecting pork's acceptability already is under way at the American Meat Institute Foundation. This whole subject is scheduled for a thorough airing at the National Swine Industry Conference in St. Louis in November. Whatever the corrective measures may be—in production practices, in the products on the counter or in the hog himself—it will take some time and considerable effort to win back a higher percentage of the consumer's meat dollar going for pork.

Poultry consumption is now estimated at about 38 pounds per person, which is more than double the 1940 figure and is equal to nearly 60 per cent of the per capita consumption of pork. Most of the poultry industry feels that profits have been badly squeezed, and there is even some talk of adopting marketing orders to control supply.

Another long-run factor is the shrinking export market for pork products, especially lard and variety meats. During the 1950's, our lard export averaged about 600 million pounds annually, nearly one-fourth of the total production. For the first half of 1961, exports have totaled only a little more than 200 million pounds. And with Cuba now lost as a market—at least for the present—the year's total may fall to about 400 million pounds. Furthermore, the European market for both lard and variety meats, in fact all meat products, is under considerable pressure by Common Market considerations.

I'd like to call attention to the upward trend in the use of lard in shortening and margarine. Actually, the wisest policy might very well be one of accepting the notion that lard is a raw material. If we can remake it into a product that more nearly meets consumer requirements, isn't that the thing to do?

Don't Sell Hogs Short

While the swine industry may seem to have plenty of problems, one should not sell the hog short. It is plain that the modern Meat-type hog is a vast improvement over earlier models. Swine breeders are not relaxing their efforts; further improvements in the hog can and will be made.

We now have cholera legislation, and this should provide a long step forward in reducing death losses. Fourteen pigs per litter is possible, and there no longer is any real question but that the Meat-type hog is the most efficient kind to raise. Feed conversion efficiency is still considerably poorer than the chicken, but 100 pounds of pork from 300 pounds of feed has been attained in numerous feeding trials. The swine industry has awakened to its problems and is doing something about them.

There is less seasonal variation between winter and summer hog slaughter now than 10 years ago. This reflects the growing practice of multiple farrowing.

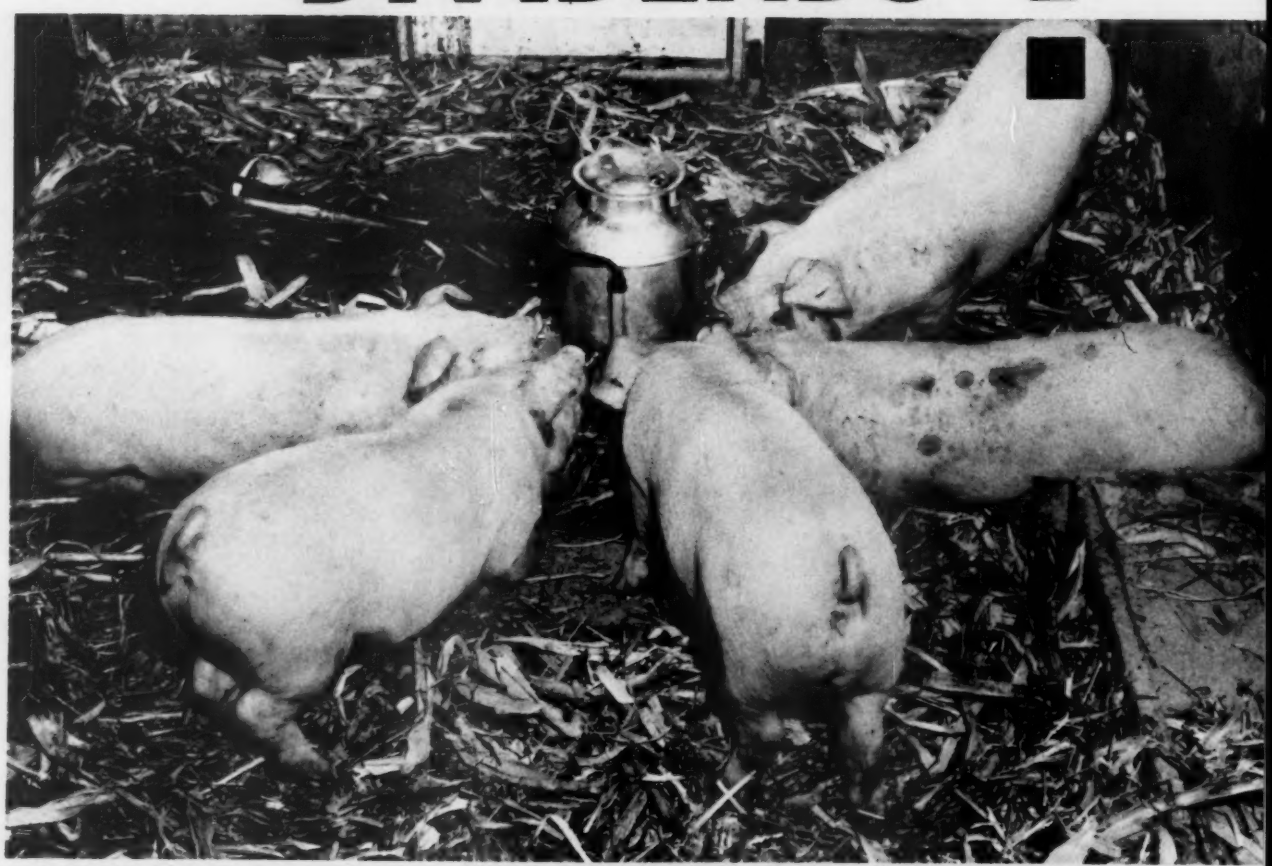
What's the Matter with Sheep?

Since 1950 our sheep population, although sharply reduced compared with earlier years, has increased gradually. However, this year's slaughter has been quite large relative to the lamb crop, and most observers expect this to cut sheep numbers next Jan. 1 back to about 32 million head. This will probably mean some reduction in the 1962 lamb crop, and a similar reduction in lamb marketings next year.

Do Your Hogs Pay DIVIDENDS?

► Approximately 9 to 10 months are required to produce a market hog from the time of fertilization. About 40 per cent of this growth period takes place within the uterus of the sow. The swine producer must rely on the sow to provide the proper conditions for efficient production during this period. Obviously, the kind of job that the sows do is a very important contributing factor to the efficiency of the entire swine operation.

Gilts and sows selected for the breeding herd should meet two major qualifications. First, they should possess the ability to produce and to rear a litter of pigs. This includes freedom from abnormalities and diseases that may cause sterility, adequate mammary development and strength to the feet, legs and body. Secondly, they



should carry the genetic potential for the production of meaty, rapid-gaining, efficient pigs.

Many sows are capable of producing a litter but the litter may be twins or at least so small that it has little chance of showing a profit. The problem then becomes one of increasing litter size.

Management and inheritance both contribute to litter size at farrowing. However, it appears that the relative importance given these factors by the average swine producer when considering litter size is in greater disagreement with the scientific information available on swine production than for almost any other trait. Numerous experiments as well as practical experiences have shown that the heritability of litter size is quite low.

In contrast to litter size, selection within a herd or breed is a very effective means of improving meatiness in swine. Back-fat thickness, loin eye area and carcass length are all highly heritable. A swine selection program designed to place emphasis on meatiness can be expected to make considerable permanent improvement in these traits. Unfortunately, it is not possible at the present time to measure many of the important carcass characteristics without slaughtering the animal. Even so, back-fat thickness as measured by the live-animal back-fat probe is rather closely related to total carcass merit and does make available an objective live-animal measurement of meatiness. Also, experimental results being collected on the use of high frequency sound waves to measure loin eye area on the live animal are encouraging.

The heritability estimates for rate and efficiency of gain are intermediate. Progress will not be as rapid as that obtained for meatiness but more than can be expected for litter size if equal selection pressure is applied for each trait. Direct selection of feed efficiency is usually not practical as it is difficult and expensive to obtain measurements on individual animals. However, rate and efficiency of gain are correlated. Selection for rate of gain can be expected to produce improvements in both traits.

Genetic progress in a trait can only be made if selection of superior animals is made, regardless of the degree of heritability. Selection pressure for a single trait is decreased as the number of traits included in the selection program are increased. For this reason, only those characteristics that are inherited and are of economic value should be included in the well-planned selection program. More rapid progress will then be made in these traits since it will be possible to select more breeding animals that rank well above the herd average in these characteristics. To use this opportunity on the selection for a superiority that is not transmitted to the offspring is not efficient, productive effort by the swine herdsman even though the trait has a high economic value.

Selecting Gilts

► Records are necessary if selection is to be based on performance. A means of identifying each animal is also required which means that the preparation for your selection program should begin at farrowing by ear-notching the pigs. An initial selection of replacement gilts should be made at 150 to 175 pounds. Gilts with inherited defects can be culled first along with those animals showing distinctly inferior gaining ability and faulty conformation. Live-animal back-fat probes should be made on the remaining gilts when they reach 190-200 pounds of body weight. A suggested procedure for taking probes and adjusting them to a constant weight for comparisons among animals is available.*

The final selection of gilts to be used for replacements should be made in a manner that gives emphasis to meatiness. One suggested method is to first rank the gilts on the basis of the live-animal back-fat probe. *Then from* the leanest two-thirds or three-fourths, make your final selection on the basis of rapid gains and good conformation.

Selecting the Boar

A performance tested boar that is meaty and has proved his ability to make rapid, efficient gains will be a big help to insure the production of a profitable pig crop. From the genetic viewpoint, the boar is half the herd. You should take advantage of this point in your breeding program by always using what your records and best judgments indicate is a genetically superior boar. Relatively rapid progress can be made in the swine herd merely by the continual use of boars that are better than the average of the pigs presently produced. Much of this improvement can also be lost in a short time if an undesirable boar is allowed to become a herd sire.

Remember that a sex difference exists in back-fat thickness. Boars are thinner than gilts and gilts are thinner than barrows. A boar carrying 1.2 inches of back-fat at 200 pounds would have likely had 1.4-1.5 inches had he been castrated. Also, barrows will be expected to be fatter than their sire due to this sex effect on back-fat. Minimum requirements acceptable for these traits will vary among herds. Back-fat probe and rate of gain data on the sows and replacement gilts are of assistance in establishing minimum standards that the boar must meet. One breeder may find that he needs to give additional emphasis to rate of gain whereas another producer may desire to put nearly all of his boar selection pressure on back-fat thinness.

Litters such as the one below will put extra dollars in the hog raiser's pocket come market time.

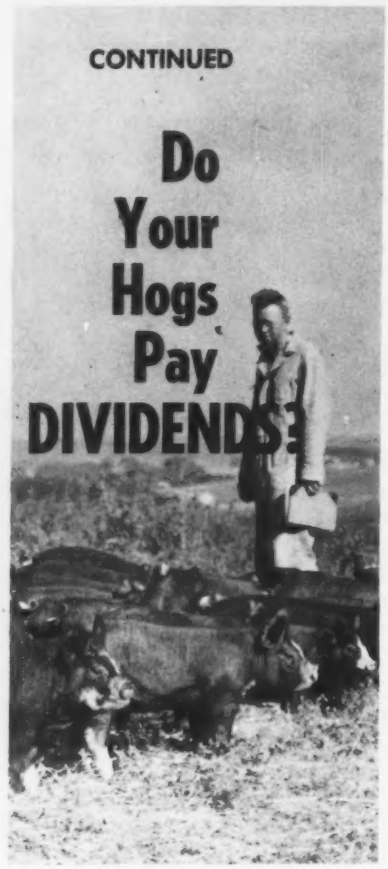
The herd boar should be tested and found free from brucellosis and leptospirosis. The absence of any inherited defects such as umbilical or scrotal hernia and an undescended testicle should be a must. Good feet and legs are necessary for the boar to breed satisfactorily. The importance of strong bone becomes particularly evident in older mature boars.

Select boars with 12 or more teats. Teat number is rather highly heritable and this characteristic will be transmitted from the boar to his daughter.

The number of pigs in the litter the boar is selected from should be secondary to meatiness, rate of gain and soundness. A fertile boar has little influence on the size of litters he sires. This is controlled by the physiology of the sow. Some superiority for litter size is transmitted from the boar to his daughters but the low degree of inheritance for litter size lessens the importance of culling or selecting boars on the basis of litter size.

MORE

CONTINUED



Care of the Boar

Give the herd boar an opportunity to become accustomed to new surroundings before the breeding season starts. This means buying the boar you need, and want, 1 to 2 months before he will be used. Provide a ¼ acre lot for exercise and adequate shelter. Feed a well-balanced 16% protein ration for a month before, and during, the breeding season. Hand-feed a low energy ration during the non-breeding period to control the condition of the boar. Over-finish is a major cause of reduced fertility and lack of sex drive in boars. Increase feed intake during the breeding season in accordance with the boars requirements to maintain a satisfactory breeding condition.

Make a fertility test of the boar before he is mated to replacement gilts. Two or three market gilts may be bred in advance of the breeding season to test for fertility.

Hand-mating is recommended; especially in sow herds of 15 or more animals. The advantages of being able to use each boar on more gilts and sows and a record of the breeding date usually outweigh the disadvantages of the extra time and effort required to make hand-matings.

The maximum number of sows that can be assigned to each boar varies considerably. However, mature boars usually can be used 3 times a day and 12 to 14 times per week without a reduction in fertility. Yearling boars should be limited to a rate of about three-fourths the schedule for mature boars.

Boars of the same age may be allotted together but is not advisable to group the housing of mature and young boars. Tusks should be removed from mature boars periodically as a safety measure. Bolt cutters or a hack-saw may be used for this purpose.

Care of Sows

► Gilts used for replacement stock should be separated from market hogs when weighing around 175 pounds. They should be fed a growing ration until 2 to 3 weeks before breeding. Breeding should be delayed until the second or third heat period following the onset of sexual maturity; which would usually make gilts 8 to 9 months of age and weighing approximately 240-260 pounds. This delay in breeding is important because there is a significant increase in the number of ovulations (eggs available) with successive heat periods. In turn, the upper limit of litter size at farrowing is increased when breeding is delayed from the first to the third heat period.

Ovulation rate can also be increased by "flushing" gilts, which means that the feed intake should be increased about 2 weeks before breeding to a full-fed level and maintained until breeding. Bred gilts should then be switched back to a low-energy ration that contains adequate protein, minerals and vitamins for rapid growth.

Two services should be used per gilt or sow when sufficient boars are available. Breed once on the first day of heat and again on the second day. When only one service is used, breed at the end of the first day of heat.

Pregnancy Period

► Feed pregnant gilts and sows in a manner that will prevent them from becoming too fat. Start on a limited-feeding program immediately after breeding. Use hand-feeding or self-feed a low-energy, bulky ration. Gilts with acceptable growth and condition at breeding should be provided with a pound of protein supplement per day on pasture, and 1¼ pounds per day in dry lot. These protein allowances may be reduced by ¼ pound per day for sows. Reduced gains of about ¾ pound per day for gilts and ½-¾ pound per day for sows during the pregnancy period will improve the reproductive performance of the herd over that obtained when the animals are allowed to become too fat.

Feed intake should be gradually increased during the last 1½ months of pregnancy to provide for increased nutrient requirements of the sow. However, the amount of increase should be made with the idea in mind that a tendency seems to exist to over-feed sows, not underfeed.

Provide sufficient feeder and watering space to provide equal feeding opportunity among animals. A six-foot feeding trough will provide adequate feeder space for 6 to 7 gilts or sows. A four-hold self-feeder and one automatic watering cup will provide the necessary feeder space for about 12 animals.

Stalk foraging provides an acceptable and inexpensive method for feeding pregnant sows and gilts. However, precautions should be taken to provide sufficient protein supplement and to prevent the sows from becoming too fat if an abundance of corn has been left in the field. Limiting the time that the sows are allowed to glean may be used to control condition.

Farrowing and Lactation

► The average gestation period of swine is 114 days. Close observation should begin at least one week before the calculated time of farrowing since some sows will be expected to have a shorter gestation period than the average.

On the 107th day after breeding, the sows should be brought into the farrowing quarters, washed with soapy water and placed in previously cleaned farrowing stalls or a holding pen. Sows placed in holding pens should be transferred to the farrowing stalls at least 1 to 2 days before farrowing to give them time to adjust to the surroundings. The appearance of milk in the udder usually precedes farrowing by about 24 hours.

The merits of using farrowing stalls have been conclusively demonstrated and their use is highly recommended.

A deep layer of finely ground corn cobs has been observed to provide good bedding for farrowing

stalls; especially when the abrasive action of pens with concrete floors has created a problem of open sores on the knees and feet of the baby pigs.

The feeding schedule of sows should be changed two to three days before farrowing to avoid digestive disturbances that may also lead to milk production problems. The amount of ration fed should be reduced by about 50 per cent and a more bulky type of diet is usually recommended which can be formulated by incorporating bran into the ration. There also seems to be merit in an alternative procedure whereby the daily feed intake is reduced but the constituents of the ration are not changed. This method of feeding appears to be particularly applicable for sows self-fed a bulky, low-energy ration during the gestation period.

Feed intake should be increased gradually for the first three or four days after farrowing and then the sows may be placed on a self-feeder if they show no disorders. Sows in farrowing stalls can be satisfactorily fed and watered by turning groups of sows into pens containing automatic feeders and waterers for two, one-hour periods each day.

Litter size is influenced by many factors. There is no single, easy method that will guarantee large, healthy litters at farrowing from all sows and gilts in the herd. However, proper management that continues daily from selection of the breeding stock to farrowing is a big help, and likely the best method available, to insure the production of profitable litters. ◄

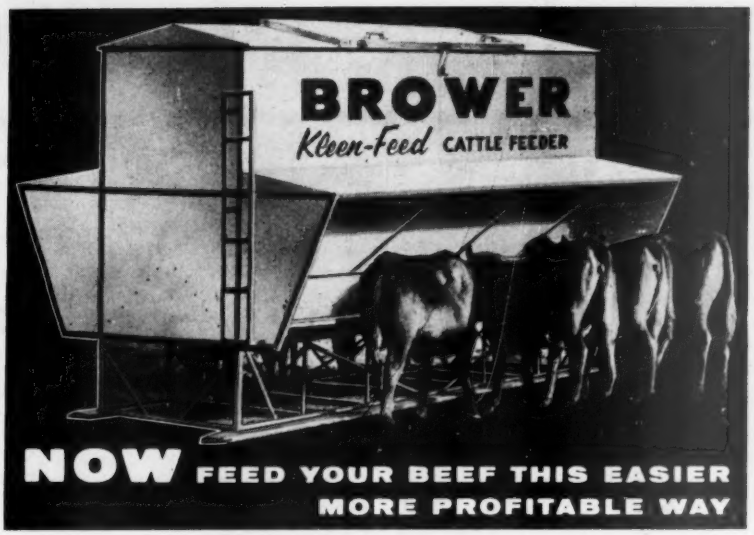
From Folder No. 46, "Probing For Profit," Missouri Agricultural Experiment Station, Columbia, Mo.

IODIZED SALT FOR CALVES

There is some evidence that an iodine shortage may cause calf losses. Hydrocephalus or "water on the brain," a calf killer that appears to be on the increase, was halted when sires and dams were switched to iodized salt.

Oregon State College livestock geneticist Dr. Ralph Bogart inspected calves born dead with hydrocephalus and found they had enlarged thyroid glands. When he switched to iodized salt there were no more enlarged thyroids and no hydrocephalus.

Later, when non-iodized salt was used, five out of seven calves sired by one bull were born with hydrocephalus and died.



BROWER *Kleen-Feed* CATTLE FEEDER

Two Sizes — 15 Ft. and 7½ Ft.

- Fill Only Once a Week
- Trough Design Saves Feed
- Feed in Trough Always Fresh
- Improved Palatability Increases Intake for Faster Gains

Now — an exciting new self-feeder for cattle! Two sizes to meet the needs of large or small herds. Large size has 250 bu. capacity, feeds 100 cattle for a week on one filling; the 7½ ft. feeder, 125 bu. capacity, does it for 50 head. Saves over 100 hours of labor a year. Big feed savings, too — special designed trough all but eliminates waste . . . keeps feed clean, fresh, more palatable. Cattle eat more . . . make faster, more profitable gains. WRITE:

BROWER MFG. CO., Box 2875, QUINCY, ILLINOIS

BROWER MANUFACTURING CO.
Box 2875, Quincy, Illinois
Send facts on
☐ Cattle Feeder. ☐ Calf Creep Feeder
Name
Street or RFD
Town State

NO HORNS!

One application of Dr. Naylor's Dehorning Paste on horn button of calves, kids, lambs—and *no horns will grow.* No cutting, no bleeding. 4oz. jar—$1.00 at your dealer's, or mailed postpaid.
H. W. NAYLOR CO.
Morris 12, N.Y.

Dr. Naylor's DEHORNING PASTE

"AUTOMATIC LIVESTOCK WATERING ...THE LIFESTREAM OF PRODUCTION"

by J. W. (Jack) Sampier
Editor, National Livestock Producer

Valuable reading for every livestock man, every dairyman, every poultry raiser . . . by one of America's most noted farm editors. 24 fact-filled pages, complete with photos and water tables. Water is your cheapest feed . . . this book tells you how to use it for more profit! No obligation. It's yours for the asking. Just mail the coupon.

RITCHIE MFG. CO. 428 WALNUT ST.
CONRAD, IOWA
Please send me a FREE copy of the "Automatic Watering" booklet by Jack Sampier.
Name
Address RFD
Town State
Since 1921 • America's Most Complete Line of Waterers

Current Rate
%
Per Annum
Earn this high rate of dividend and get one of these valuable free gifts . . . from this modern 53 year old Association. Save by Mail . . . and we will handle all details for you.
MONEY IN BY THE 15th EARNS FROM THE 1st!
POLAROID CAMERA KIT
Free with $3,000 Account
G.E. CLOCK RADIO
Free with $1,000 Account
G.E. ALARM CLOCK
Free when opening account for $100 or more.
53 YEARS • 1908-1961
CITY SAVINGS ASSOCIATION
1656 W. Chicago Avenue • Chicago, Ill.
ASSETS OVER $22,000,000.00

American Livestock Journal

A QUICK REVIEW

Dangerous After Frosts

► More reports are received about cattle deaths from no apparent reason during the winter months than at any other time, says Bob Farquhar, Auburn, Alabama Extension cattle and sheep marketing specialist.

Farquhar has the following explanation as one possible cause of these deaths which occur with no obvious accompanying symptoms.

When grazing begins to get sparse and cattle begin searching harder for forage, they become less choosey about the plants they eat. And often they come in contact with poisonous plants, especially if they have access to wooded areas.

A few of the more common plants known to be poisonous to cattle are bracken fern, wild cherry, buckeye, mountain laurel, wild hydrangea or sevenbark, mistletoe, water hemlock, white snakeroot, chinaberries, and ground ivy.

Cattle symptoms from eating poisonous plants can vary from trembles or staggers to immediate death, the cattle specialist says. Internal poisoning is usually accompanied by a craving for water, and often cattle will be found dead near a watering area.

Since prevention is by far more effective than treatment, Farquhar recommends that farmers check any suspected areas before cattle have time to do much browsing. Wooded areas known to contain poisonous plants should be fenced off. Or if only a few of the poisonous plants exist, they can be dug out and destroyed.

Many affected animals can be saved, the Auburn cattleman adds. A veterinarian can often administer effective medication if he is called in time.◄

Stalkfield Supplement

A University of Illinois livestock specialist reports that cattle and hogs fed protein while gleaning cornfields will gain enough weight to more than pay the supplement's cost.

As proof, G. R. Carlisle cites a trial in which gains increased ¾ pound per head daily when the cattle received a protein supplement. Each dollar spent for supplement returned $2.85.

The average of 13 corn-belt experiments has shown that:

1. Pigs receiving supplement each gained ½ pound more daily while gleaning cornfields.
2. Each bushel of corn produced 4.5 more pounds of pork when supplement was fed.
3. Each pound of supplement saved 6.4 pounds of corn.

If corn in the field is worth only 50 cents a bushel, a supplement must cost over $6.00 per hundred pounds before it becomes too expensive to feed.

Pelleting Doubled Gains

► Research reports from several experiment stations have shown that the pelleting of poor grade hays and other roughages will increase the consumption by ruminants, improve the daily gain and feed efficiency. Tests at Illinois have shown that beef calves will gain 1.73 lbs. daily on a pelleted hay and only 0.63 lb. on the same hay baled or chopped. Two hundred and twenty pounds of beef were made from a ton of pelleted hay and 115 pounds of beef from a ton of the same hay baled. Pelleting high-energy diets has not improved the daily gain of cattle but, in some instances, has increased the feed efficiency about 14%. A recent test at Purdue has shown that the pelleting of a diet containing 70% corn cobs and 30% concentrate improved the daily gain from 1.57 to 1.98 pounds, and the steers on the pelleted rations required 14% less feed per unit of gain. Similar diets containing 20-45% corn cobs showed no improvement in daily gain or feed efficiency.

There is a great interest in the pelleting of all types of roughages such as sorghum silage, corn silage, etc., and many large feedlots will adapt this method for their cattle feeding operations. Pelleting has gained in popularity in the formation of supplements for beef cattle. Cattle will usually eat pelleted feed much quicker than they will meal, and also it permits the simultaneous feeding of nutrients in a condensed form.

Although the fundamental reason is not known, it appears that diets high in fiber are more adapted to pelleting than those high in energy. Condensing a bulky feed like hay allows the animals to consume more, permitting a larger intake of nutrients above maintenance requirements.

Cull Cows For Heavier Calves

■ IN EVERY LARGE HERD of beef cows that hasn't been culled closely there will be a good 200-pound spread between the calves produced by the top cows and calves from the poorest producers.

After a little figuring, one can see that a 600-pound calf brought a return of $147 in this year's feeder calf sales, and a 400-pound calf earned only $98 for the cattleman. This is a difference of almost $50 a head.

Not only this, but it is the difference that will spell success or failure for a number of cattlemen unless they do a better job of culling, and of managing their cattle.

Therefore, three things that cause the wide differences in production in beef cattle are: breeding, feeding, and management.

If the breeding is not there, the only solution is to get the cow out of the herd, and the s o o n e r the better. If a cow inherits a slow growth-rate, or is a poor milker, the market is the place for her.

The cattleman has more control over feeding and management, although the lack of sufficient pasture is more often a cause of light-weight calves than a poor winter feeding program.

Management also plays a big role. A cow that doesn't calve until spring does not have a chance of producing a profitable calf in the fall. Every month after the first of January that a cow fails to calve, will cost 50 pounds at market time in the fall, says the husbandman. Calving time has a great influence on what calves will weigh at market time.

To do a good culling job, you must be able to identify cows. Using tags on neck chains is good but rather expensive. Ear tags are not expensive, and some of the newer ones are satisfactory. Branding numbers on cattle is a very satisfactory method, but more difficult. Branding also takes more time than the other methods.

As each calf is born, its birth date should be recorded and it should be

ear tagged. Proper identification and records will tell the story of each cow's production. With proper records it is easy to tell the producers from the boarders.

Whatever method is chosen, the cattleman must increase his output per cow. Proper record-keeping is the only way he can tell where he stands.◄

Warning On Stilbestrol

The Food and Drug Administration has a test for detecting the presence of stilbestrol in meats and meat food products. It is sensitive to 2 parts per billion.

Originally the authorizations granted to many feed mills and some growers for the use of stilbestrol in cattle feeds imposed certain restrictions. These limited the amount of stilbestrol feed per head per day and they cautioned against feeding stilbestrol within 48 hours of slaughter. This two full-day withdrawal period was found to be necessary to insure no residue of the drug in the edible portion of the animal at slaughter.

The warning about the withdrawal of stilbestrol-containing feed should be strictly observed by all. The Omaha Livestock Exchange has proposed that steer feeders sign a document in which they certify that their cattle have not been fed stilbestrol within 48 hours before going to market.

Cow Costs In '62

■ AGRICULTURAL ECONOMISTS AT Virginia Polytechnic Institute have put together some interesting figures on how much it costs to keep a beef cow a year, says George Litton, head of the animal husbandry department.

Winter feed costs are put at $33, for 1½ tons of hay costing $22 per ton. This may not be representative for all geographical areas where in cold weather cows require more feed.

Summer feed is figured at $34, for 2 acres of pasture at $17 an acre. Pasture costs were figured as follows: fertilizer amounted to $6.30 per acre; interest at 6 per cent on land valued at $100 an acre came to $6; fencing the land, clipping it, and spreading the fertilizer accounts for another $4.70, making a total of $17.

Therefore, 70 per cent of total annual costs of keeping cows is in the feed and pasture charges. If total figures are available, it is easy to figure feed costs.

A charge for machinery and equipment is placed at $2 a year per cow. The cow is valued at $150, so interest and taxes on this amount come to $9. There is a charge for the bull that amounts to $5 per cow.

It has long been known that labor is one of the bigger miscellaneous items. The economists arrived at a figure of $8 for labor costs per year for one cow. A bedding and comfort charge of $1 was added.

Whether there are buildings or shelters, there are holding pens and chutes and lots and extra fencing and repairs for these, which may amount to $6 per cow per year. Another bill that can't be ignored is $3 for veterinary services and for testing, and medicine charges.

The total comes to $101 per cow per year, but a credit is allowed of $5 for manure. This brings the total figure down to $96.

Applying these figures to the cattle business the last 14 years there would be five years of either breaking even or going in the red, and nine years of making a little money.

This depends, he adds, on the most efficient management and with close attention to calving percentage. If the calving percentage gets down to 83 per cent, the cost of the calf will not be held to the present $96 figure, but would rise to $115.66. At this figure, cattlemen would have lost money in about half of the last 14 years.

Other items will affect profit in addition to the cost of keeping cows. Weight of the calf at market time is one of these other items. If each cow has a calf and the calves weigh 500 pounds, the break-even cost would be $19.20 per cwt. If they weighed only 400 pounds the break-even point would b e$24 per cwt.

The importance of grade is just as keenly felt, say Litton. Each time a grade is lowered, it is the same as taking off 60 pounds of weight.◄

$30 More Per Calf

Elizabeth Thompson manages a farm in Mahoning County, Ohio. She paid us $600 for a weight-tested bull. Now she sends me the records on her 1960 calf crop, compared with the previous year from the same cows but bred to an ordinary Hereford bull—15 calves.

The 1960 calves had birth weights of 79.6 lbs.; the 1959 calves, 82.8 lbs. Weaning weights were approximately the same, 478 lbs. But in 180 days the 15 calves by the performance-tested bull averaged a daily gain of 2.19 lbs. apiece; while the others took 242 days to make a daily gain average of 1.59 lbs. So if Mrs. Thompson sold her calves for feeders at less than 10 months of age, she got $450 extra profit from the growth-tested bull the first year.

Like Lord Kelvin said: "When you can measure what you are speaking about and express it in numbers, you know what you are doing; but when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind." **—Charles E. Haigler & Son (Robert), Herefords, Washington C.H., Ohio.**

At The English Royal

There were twice as many Dairy Shorthorns as Beef Shorthorns and Lincoln Reds put together. The reason probably is that there are more milk-drinkers than beef eaters in England today. The Galloways are making a new mark here as meat-type beeves, and nothing on the grounds was more startlingly picturesque than the Belted Galloways.

The champion Red Poll cow, a 5-year-old, convincingly shown in-milk, was bred and exhibited by the President of the Royal Agricultural Society, Col. Sir Robt. Gooch, who farms in Suffolk. She was entered also in the production-inspection class. She beat the entry of Queen Elizabeth II, from Her Majesty's herd at Sandringham in Norfolk.

In dairy and dual-purpose cows, a Holstein-Friesian judge from Scotland gave the Jerseys the supreme championship over all. It made a fitting start for the Fourth International Jersey Conference, which started on the last day of the Royal and lasted a week. The American Jersey Cattle Club contributed Harry Strohmeyer, world distinguished animal photographer, who showed them how to take Jersey pictures, you bet. President of the Jersey Cattle Society of the United Kingdom is Mrs. G. J. Caddey, whose herd at Egham in Surrey was inspected by Jerseymen from 14 countries. Queens, Presidents, Dairymaids—never underestimate the power of a woman!

Polled Shorthorn calves are now registered by the American Shorthorn Association, Livestock Exchange, Omaha 7, Neb., C. D. Swaffer, Secretary.

UNUSUAL CATTLEMEN'S MEETING

Impressions of the annual meeting of Performance Registry International at College Station, Tex.

by Arthur Patrick, Jr.
Richland, Tex.

Why did most of the 200 attendants at the Performance Registry International's Sixth Annual Convention at College Station, Texas on June 22nd and 23rd, say it was the most unusual cattlemen's meeting they had ever attended?

It was unusual from the almost total elimination of the customary addresses of welcome, responses, long-read addresses, full of statistics, etc., which customarily occupy half or more of the precious few hours a year when cowmen meet to discuss their business.

The objective of the meeting was to bring into focus the dilemma of the beef cattle breeder and to indicate practices and standards which were available to solve his problems. First on the program was a speaker who explained what the Swine Performance Program with its certified litters and Certified Meat Sires (C.M.S.) had done to produce certified carcasses and win "friends for pork." This was followed by a representative of the Packing Industry who said the breeder's program had encouraged the Packers to retrain their buyers to buy the lately developed specification carcasses and to pay a premium for them.

Next came a representative of the IBM electronic processing industry who showed slides which displayed how records of Performance, with groupings and averages of progeny records by sire and by dam, taken at weaning age, year old and beginning and ending of feed test trials were relieving stockmen of the details and complexities of compilations and giving them an accurate and comprehensive knowledge of their herds.

Third and last was the climax of the meeting when live steers were exhibited, slaughtered and reshown as dressed carcasses. After this, standards of excellence for superior beef carcasses were presented. These standards were based on a level to include the top 25% of the usual run of carcasses of choice grade meat. Sires of progeny meeting those standards in a prescribed manner will be awarded a certified C.M.S. (certified meat sire) for their registration certificate.

Approval of this forward step in the Industry was enthusiastically demonstrated at the Smorgasbord dinner that evening when twenty-eight breeders, including Texas A & M College pledged to advance payments of $17,500 to be used by them to pay for enrolling their herds in the PRI Processing Program and in Registration Certificates of Performance and Production.

Three Breed Associations, The American International Charolais Association, The American Charbray Breeder's Association, and the International Brangus Breeder's Association, were welcomed as affiliates of PRI and given representation on its Board of Directors.

To anyone who has read the constant run of articles on the need for new and realistic standards for beef cattle in Livestock Periodicals for the past several years, it seemed as if at last the forward movement for beef cattle was beginning to take shape and had found a vehicle for its expression.

Registered attendants at the meeting were:

Ranchmen 112, Government, State and College Men 38, Breed Association Representatives 12, Reporters 10, Artificial Insemination Association Representatives 8, Tabulation Services 2, Packers 2, Portable Scales 1. Total 185.

In Case Of FALLOUT

Better be Safe than Sorry

U.S.D.A. has taken over many of the responsibilities of civil defense on farms. Farmers' Bulletin No. 2107 is the best publication you can find on "Defense Against Radioactive Fallout on the Farm." A postcard to U.S.D.A., Washington 25, D.C., will bring it to you.

One of the lectures on what the farmer can do about his livestock is briefed here for you. Few farmers will forego the minimum care their stock requires. This need may determine the location of your family shelter, its size, and some of the supplies. The shelter, or a special one for the caretaker in or next to the barn, should be considered. This will permit short periods for necessary work with less exposure.

In a large-scale attack, we could lose our electric power for days or even weeks. If power loss is likely, one steady source of electric power is a standby generator. Many of you already have them. Since an emergency generator to supply the shelter with power, provide water for livestock, and run our milking systems and automatic feeders, depends on fuel, consider increasing your normal fuel supply.

How much can they take?

Some animals resist the effects of fallout radiation better than others. Horses, donkeys and hogs, have about the same resistance as humans; sheep only about three-fourths as much. Normally, cattle will not die until they have absorbed a dose of radiation half again that required to kill people.

We must have shelter for our animals if we are save them. We should decide now on a plan of action to protect them in the one to 6 hours we may have between warning and the time fallout reaches us.

Our livestock protection plan should save our most valuable animals first. Place your best breeding stock or choice milkers in buildings such as potato cellars or barn basements. Then fill your other farm buildings to capacity with less valuable animals.

Several feet of hay in an overhead loft would help protect livestock from fallout. And hay, stacked around the sides and ends of a barn, would improve the protection.

A barn basement could provide considerable protection, particularly if earth fill is placed against exposed walls. Doors could be quickly shielded with bales of hay or with sacks of earth or grain.

Clean feed and water within the barn itself would cut down the chances of much radioactive dust being swallowed by the livestock. If livestock cannot be put under cover, they should at least be confined to a small lot where they cannot graze on grasses or forage which has been contaminated by fallout. Water, of course, should be available.

Down Wind 170 Miles

When we consider time spent out of shelter to care for animals, we must understand the price, in hazard, the caretaker pays when he leaves his shelter. The better the shelter, the more time the farmer can spend outside. This is because he receives little radiation in a good shelter and therefore can risk absorbing more while doing necessary chores.

Let us assume that a large nuclear weapon has exploded 170 miles away, and that fallout from the explosion has come down on us. Only radiological monitoring of an area could tell us accurately how long we could remain safely outside a fallout shelter.

Trained monitors, including personnel of the Soil Conservation Service and the Forestry Service, the Weather Bureau, and the Federal Aviation Agency, will take readings of radioactivity on instruments. Their reports will be broadcast by radio.

The first week is the most dangerous. We could use up one-fourth of our emergency exposure just by spending 15 minutes a day outside during that week. Even so, the first 15 minutes a day outside should not be before 12 hours after the explosion. By remaining in shelter for the first 2 days, the time outside could be increased to 30 minutes a day for the rest of the week without increasing the acceptable amount of radiation you would receive. The danger would decrease with time because the radiation level would be dropping as a result of natural decay. Staying outside the shelter a full 30 minutes a day the second week would result in absorbing only 5% of the exposure.

Costs of specially-constructed livestock shelters, as with family shelter costs, will depend on what we can do for ourselves. Where a farmer has a contractor cover a quonset-type structure with earth, costs may reach the value of the herd he wishes to save. On the other hand, if he builds it himself, his cost will be for those items he does not already have and the fuel for his equipment.

An animal shelter some of you may wish to consider is a trench similar to that you might use for a trench silo. It will be better if it is covered with earth, the thicker the cover, the better. The earth may be supported by material you have at hand such as used timbers or what you can cut from your own woodlot. Concrete will provide longer lasting support.

Lakes, ponds and streams might be dangerous sources of water for some time after the explosion. Well water, if the well is covered, would be safe. One farmer built his shelter around a well. He uses it as a fruit cellar and has an alternate source of power to the well pump and the shelter in this tractor-driven generator.

If livestock feed is in a silo, even one without a dust-tight cover, fallout would be concentrated mostly in the upper 12 inches of silage. The rest of the silage probably would be safe for use. Hay, either baled or loose stacked, could be fed if care was taken not to feed the top layers. Sacked or loose grain stored in a bin would be safe if relatively free of dust. It would be dangerous to graze livestock on pastures until rain had washed even light fallout off the grasses.

If fallout reaches your area, it will be reasonably safe to leave your shelter for brief periods—after a day or two—to handle such jobs as taking care of your livestock—long before it will be safe to live and work outside a shelter.

MEN PAST 40

Afflicted With Bladder Trouble, Pains in Back, Hips, Legs, Nervousness, Tiredness.

If you have these troubles, particularly bladder trouble, then your condition may be traced to Glandular Inflammation . . . a constitutional disease. Medicines that give temporary relief will not remove the cause of your trouble. Neglect of Glandular Inflammation often leads to premature old age and sometimes incurable malignancy.

The past few years men from over 1,000 communities have been successfully NON-SURGICALLY treated here at Excelsior Springs for Glandular Inflammation. They have found soothing relief and a new outlook in the future of life.

The Excelsior Medical Clinic, an institution devoted exclusively to the treatment of diseases peculiar to older men, has a NEW FREE BOOK that tells how Glandular Inflammation may be corrected by Proven NON-SURGICAL treatments. This FREE BOOK may prove of utmost importance in your life. Write today. **EXCELSIOR MEDICAL CLINIC, Dept. B 1540, Excelsior Springs, Mo.**

I showed 'best 10 head'-thanks to Sho-Glo!

BEAU MEEK, manager of Hudspeth Land and Livestock Co., Prineville, Oregon, showed the Best Ten Head of Herefords at the 1960 Chicago International. "They were fitted on Albers Sho-Glo all the way. It sure does a great job!" Sho-Glo builds winner's circle bloom and finish–fast!

Dept. AL-101
Albers Milling Company
1016 Central Street
Kansas City 5, Missouri

Sho-Glo

FREE ALBERS BEEF WEIGHT COMPUTER!
Figure weight easily, accurately.
Enclose Albers Quality Control Circle.

Name_____

Address_____

Every Fair For 56 Years

Some owners take the position that it would ruin a crop of beef calves to creep feed them. But done in a common sense way with simple grains and no high priced supplements, condiments or milk substitutes, I feel that it is o.k. so long as it is profitable.

We can never tell what a calf will do unless he has feed available on which to do it.

In performance testing the fact that an animal has been subjected to testing is not what counts in my mind, but how he performed—how much he gained and how well he stood up under heavy feeding, what was his grade and weight per day of age.

So with creep feeding—it should not condemn a calf. But depends on what he was fed and how. Was the calf fed in the barn and shut up? With access to nurse 2 times a day? What was in the feed? Did he run in the pasture, eating creep feed as and when he wanted it, perhaps eating very little when the grazing was good and his dam's milk flow was fairly heavy?—**R. W. Jones, Jr., Sumpter Co., Ga.**

Vitamin A Fortifier

► Vitamin A fortification needs more attention in cattle feeding. Old corn, poor quality hays, and overheated silages and grains are low in carotene (pro-vitamin A). Small grains such as oats, wheat, barley, and milo contain no carotene (pro-vitamin A). Cattle require about 10,000 I. U. of synthetic vitamin A per day in addition to carotene from natural feedstuffs. Something has changed the utilization of carotene by beef cattle. We produced a vitamin A deficiency in cattle by self-feeding them on 8 parts of ground ear corn and 1 part of soybean meal (Purdue A. H. Mimeo 201). These cattle gained poorly (1.62 lbs. daily) and lost $9.38 per head, while similar cattle feed Supplement A which is fortified with vitamin A made a gain of 2.44 pounds daily and a profit of $23.36 per head. Part of this difference in profit and loss was due to vitamin A.

Neumann (Illinois 1960) has reported an occurrence of vitamin A deficiency in beef cattle on rations that are more than adequate in carotene, the precursor of vitamin A. In basic studies, Pfander of Missouri (1960) has made similar observations. The change in the status of carotene conversion to vitamin A in beef cattle is an intriguing phenomenon.

MEAT HOGS
POLAND CHINAS

- **Grand Champion over all breeds and crosses at the last two International Live Stock Expositions.**
- **Grand Champion and Reserve over all breeds and crosses in the Pork Carcass Contest at the last International—Fourth (4th) time in five years Polands have won the Championship.**
- **Big, meaty Polands will give you rapid, economical gains besides Championship market quality.**

For additional information and names of breeders, write the — **Poland China Record Assn.**
501 East Losey St.
Galesburg, Ill.

—1963 National Grand Champion Barrow

The Breed with a Record!

NOW you can get 3 litters a year from every sow...

with the NORWOOD ELECTRIC Pigsaver

Put your baby pigs on the Pigsaver right after farrowing. They'll get warm sow's milk replacer day and night. Thermostat control keeps milk at right temperature. Milk kettle feeds up to 8 pigs.

Then dry up your sow. She'll be ready to breed again in 30 days. The extra litter and baby pigs saved in one farrowing will more than pay for your Pigsaver.

--- MAIL COUPON ---

NORWOOD PRODUCTS CO.
Dept. 36, Luverne, Minn.
Please send Pigsaver literature and prices.
We have_____sows. Farrow_____times a year.
Name_____
Address_____
City_____ State_____

from Portales, New Mexico . . .

"I sold ALL my bulls after seeing the results of ABS artificial breeding!"

reports Charles Scheihing

"I bred 67 of my cows artificially to American Breeders Service bulls on an experimental basis," reports Charles Scheihing, Portales, New Mexico. "The results were amazing to me.

"Of the 67 cows bred, only one required a third service. All but one calved. I've been well satisfied with the performance of the ABS calves. Now I plan to breed my entire herd of 120 Angus cows on the ABS Breeding Program. I sold all my bulls after seeing the results of ABS artificial breeding," Mr. Scheihing says.

"My replacement heifers are more uniform and of excellent quality. Besides, the cost of ABS artificial breeding is actually less than the cost of using my own bulls," Scheihing reports.

Get uniform, fast-gaining calves in your herd with progeny and/or performance tested beef sires from ABS. For service or more information, call your local ABS Distributor. Ask for the 1961 Beef Sire Directory and the ABS Beef Newsletter.

8 Great Breeds — 24 Progeny and/or Performance Tested Sires — Serving the Beef Industry

ABS

AMERICAN BREEDERS SERVICE

325 North Wells Street • Chicago 10, Illinois

HERD RECORDS

by
DR. RAY R. WOODWARD,
ABS Beef Advisor

Production records are becoming an integral part of the cow business. Not only are more and more herd owners using performance and progeny tested bulls for either natural service or artificial breeding, but they are also individually identifying cows to determine the pounds of beef produced by each cow. Record keeping and record analysis are now being sold as a service for large operations.

The use of artificial breeding offers the opportunity for more efficient record keeping, particularly in herds where multiple sires are ordinarily used. With artificial breeding, the sire of each calf is known as well as the date the cow was bred. It is a clearly established fact that most herd improvement must come about through the sire. If the identities of the sires of all calves are known in a commercial operation, then maximum use can be made of the bull doing an outstanding job.

The "fringe benefits" derived from the closer herd observation necessary in artificial breeding are both numerous and real. The detection of congenital reproductive problems and a better knowledge of calving dates are two of the more important.

Is Quality Milk Fairly Priced?

That good neighbor of yours, the Dairyman, is also mightily concerned about per capita consumption. Or maybe you have a few milk cows yourself. Well, here comes the Guernsey secretary pleading for a new look at quality milk.

by Robert D. Stewart
American Guernsey Cattle Club
Peterborough, N. H.

R. STEWART

In 1951, each person in the U. S. consumed 715 pounds of whole milk equivalent of all dairy products. This declined to 653 pounds in 1960. Each person consumed 139 quarts of fluid milk in 1951, decreased to 133 quarts in 1960. The United States ranks 15th in comparison with other countries in the per capita consumption of milk and dairy products.

The big marketing problem we have to overcome is the erroneous concept that dairy foods are fattening. Every reputable weight control diet calls for the use of milk and other dairy products.

Now, leaders in all phases of the great dairy industry should analyze their programs to determine if they are really promoting the over-all program of the industry. This may disclose that some of their policies and promotions are actually restricting the sale of milk.

Sales under our "Golden Guernsey" trade-mark have increased every year since the program was introduced in 1923. 140,189,930 quarts were sold in 1945. This increased to 234,229,351 quarts in 1959. Consumers prefer the highest quality milk they can get. For the 10th year, "Golden Guernsey" milk products were dispensed at the American Medical Association convention in New York last June. Approximately 10,000 doctors sampled the products and over 2,200 signed requests asking that a sample be delivered to their homes.

An example of the consumer demand for the highest quality milk is the experience at Bayville Farms, Norfolk, Va. They process and distribute the production from their herd of 700 registered Guernseys. The butterfat content is not modified. It is sold as delicious, rich, fresh "Golden Guernsey" milk as it comes from their herd. They have continuously had a waiting list of customers. The first American to fly in outer space, Astronaut Alan Shepard, and his family, are Bayville customers.

The Federal milk marketing order program has stimulated the production of lower quality milk. In some areas distributors are requesting that a new pricing plan be developed for paying producers which would encourage them to produce a higher quality milk. At the present time the producers of high quality milk are penalized under Federal milk marketing orders. All producers in the pool share the advantages of the high quality milk. The incentive for continued production and promotion of a differentiated high quality milk is regulated away.

Market-wide pooling encourages the production of milk equal only to the minimum quality standards. This results in a lower quality milk offered to consumers. It is unfortunate that the USDA recommend orders with "market-wide pools." By doing this, the USDA contributes to the decrease in per capita consumption of milk.

Like astronaut Shepard, consumers in the space age want a higher quality milk. All milk producers want increased per capita consumption. How can this be done?

The American Guernsey Cattle Club has submitted recommendations to the committee appointed by the Secretary of Agriculture to study Federal milk marketing orders. Dr. Edwin G. Nourse is chairman. We would encourage the production of higher quality milk. This means more nutritious and delicious milk for the consumer, and that means higher per capita consumption. There are certain changes that if made in Federal orders would mitigate the unfair treatment that producers of high quality milk now receive.

To qualify as quality producers, a group within a plant or within a market would have to develop a program whereby their milk could be identified from farm to market, and be packaged and merchandised as a premium product. They would have to demonstrate that the percentage of Class I utilization of all such milk was substantially higher than the utilization of the pool as a whole.

To promote the dairy industry, everyone connected with it, distributors, producers, people in educational and extension work, and the USDA, should constantly direct their efforts to promoting the sale of a high quality milk with a delicious flavor and more nutritional energy.

People will drink more milk if they like it—if it tastes better. We would then see an increase in the per capita consumption of milk and a better way of life for dairymen and all connected with the dairy industry.

This is the champion living milk producer of the Guernsey breed, Ideal's Beacon's Rosette, of Sussex Co., N. J., now in her 11th lactation with a total of 200,125 lbs. milk and 9,782 lbs. butterfat in 3,957 days.

CORNCOBS & ALFALFA

Ground corncobs and alfalfa hay can be fed in combination for wintering stock cows, says Prof. J. K. Matsushima of Nebraska. But the cost of grinding corncobs is high.

Corncobs are low in protein and in most nutrients, but do supply a small amount of energy and can be used to fulfill part of the bulk in the ration. If corncobs are to make up a major portion of the ration, calcium and phosphorus needs should be investigated to balance the ration.

If the quantity of alfalfa in the mixture is limited, it may take an additional amount of protein to supply this nutrient adequately. Corncobs are not very palatable and it may be necessary to add some molasses or other palatable feed in order to get cows to consume the intended amount of cobs. If the quality of the alfalfa is low, it may be necessary to add some Vitamin A.

CORN PICKER READY?

A careful check of corn harvesting equipment may save valuable hours during the corn picking season. Begin your checkup with the tractor, noting particularly its steering mechanism and brakes. Make certain that the brakes are in good enough condition to steer the tractor and picker.

Broken braces or shields should be welded or replaced.

Kerosene brushed on the roller chains will serve as both a lubricant and a cleanser.

Loosen the clip clutches as much as possible. Then the clutches can be tightened to go through a heavy picking condition.

All worn bearings should be replaced.

Make sure that the snapping rolls are close together when picking green corn. As the corn gets dryer the rolls should be widened.

Remove any snapping pegs on the rolls, because they will shell the corn.

Make certain that the husking springs that hold the husking rolls together are strong.

All shields should be properly attached for the protection of the operator.—LES HILL, Ag. Engineer, Purdue University.

PEERLESS
ROLLER MILLS AND MIXERS
FOR EAR CORN AND SMALL GRAIN
MAKE and TAKE FEED WHERE YOU WANT TO
NEW SERIES 90, 3 in 1
ROL-N-MIX

Feeders report over 17% better feeding results with rolled feed prepared by Peerless Roller Mills. Get better finish—higher market prices —more and better milk production.

Complete Line of Stationary – Portable Roller Mills

A mill to fit every need—Portable—Stationary—Automatic. Crimp or crack any grain—dry or high moisture. Granulate ear corn — no dust — no stringy shucks—scoops and feeds like shell corn

A Money Maker for Every Livestock Farm

ROL-N-MIX, the complete feed making and hauling unit. Provides Roller Mill—Feed Mixer—Self-Unloading Wagon in one package. Cut feed bills—Save time and labor. Unloads 2 tons in 3-4 minutes

Write For Free Literature

Dept-6141 Peerless Equipment Co., Inc., Joplin, Mo.

AMERICA'S NO. 1 LINE OF "FARM AND FEEDER SIZE" ROLLER MILLS

WAKE UP RARIN' TO GO

Without Nagging Backache

Now! You can get the fast relief you need from nagging backache, headache and muscular aches and pains that often cause restless nights and miserable tired-out feelings. When these discomforts come on with over-exertion or stress and strain—you want relief—want it fast! Another disturbance may be mild bladder irritation following wrong food and drink—often setting up a restless uncomfortable feeling.

For quick relief get Doan's Pills. They work fast in 3 separate ways: 1. by speedy pain-relieving action to ease torment of nagging backache, headaches, muscular aches and pains. 2. by their soothing effect on bladder irritation. 3. by their mild diuretic action tending to increase output of the 15 miles of kidney tubes.

Find out how quickly this 3-way medicine goes to work. Enjoy a good night's sleep and the same happy relief millions have for over 60 years. Ask for new, large size and save money. Get Doan's Pills today!

CARROT OIL VITAMIN PRODUCTS

If your feeds will improve feeding and breeding results, and reduce your over-all costs. Ask for 36 page Carrot Oil booklet—and other literature. Satisfaction guaranteed.

Nutritional Research Associates
South Whitley, Ind., Department 13

get details on the . . .

WRITE FOR FREE PICTURES & PLANS

Silo-Matic®
UNLOADER and HOW TO FEED MECHANICALLY
Dept. B
VAN DUSEN & CO., INC., WAYZATA, MINN.

SAVE TIME & LABOR MAKE MONEY

GHANA MEETS HAWAII

Ben K. Quartey-Papafio, Accra, Ghana (Africa) and Allen Wall, Kohala, Hawaii, attended the August class, 1961.

at the

GRAHAM SCHOOL

for

CATTLEMEN

From wherever Dairy and Beef Cattle are produced, Dairy and Beef Men come to the GRAHAM SCHOOL for training in: *UNDERSTANDING REPRODUCTIVE ORGANS OF CATTLE *REGULATING HEAT PERIODS *CORRECTING STERILITY *TESTING BULL SEMEN *ARTIFICIAL INSEMINATION *DIAGNOSING PREGNANCY *DELIVERING CALVES SAFELY and REMOVING AFTERBIRTHS WITHOUT INJURY.

EVERY CATTLEMAN who is interested in increasing HERD EFFICIENCY and PROFITS should write for our FREE School Catalog.

Graham School, Inc.
GARNETT, KAN.

(Classes begin 2nd full week of each month—for men, 16 years of age and older.)

MAIL COUPON TODAY

Graham School, Inc., Dept. 10ALJ,
Garnett, Kansas, U.S.A.

Gentlemen: Please send complete information and your FREE 48-page School Catalog.

Name .....

Address .....

City ..... State .....

WHAT'S NEW/S?

The new 1962 "'Model 260" Hesston Windrower-Conditioner, loaded with new features, is now being introduced by the **Hesston Manufacturing Co., Inc.**, Hesston, Kansas. The new model is 100 pounds heavier and even more versatile than its "240" predecessor, a best seller last year. A Ford "EE 140" Diesel engine, now available as optional equipment, fits the demand of large-acreage hay men.

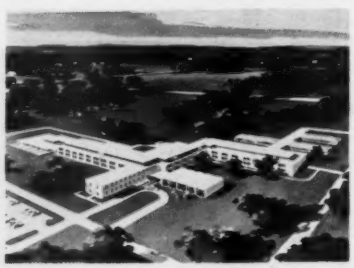
U.S. and Canadian buyers recently paid $527,000 for 355 lots of the famous Eileenmere strain of Aberdeen Angus cattle at the J. Garrett Tolan Farms in Illinois. Don Thomas of T-Bar Ranch, Monmouth, Ia., paid $46,000 for Eileenmere 1665 (pictured above). This was the top price of the three-day sale and the highest paid for an Angus bull this year.

Cattlemen from Michigan, Montana, Oklahoma, Oregon, South Dakota, Texas and Wyoming supplied themselves with breeding stock from Becton Stock Farm's third annual Red Angus Production sale at Sheridan, Wyoming, Sept. 11. Bidding was the most aggressive of the three sales which owner, Mrs. Waldo Forbes, has staged to date, and the distribution was more wide spread. The $912 average with a top of only $1,375 told a great deal about the uniform quality of the offering.

(From the Western Livestock Journal)

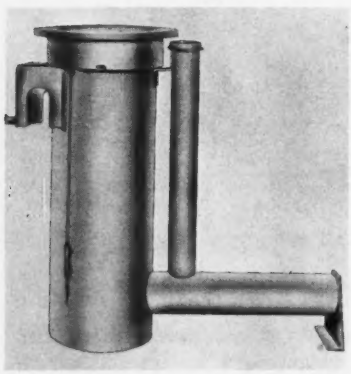
Louise Knolle of Sandia, Texas, the 1962 Dairy Princess, gets acquainted with one of the prize Jersey cows at the Eastern States Exposition where she made her first public appearance since being chosen Dairy Princess Sept. 13 in Chicago.

A new innovation in cattle neckwear is illustrated by the fiberglass-vinyl cow strap identification marker above. The insert at left pictures the new anklet strap also made of fiberglass and vinyl material. **Elkhorn Products** of Elkhorn, Wisc., and **Houze Glass Corp.** of Point Marion, Pa., developed the straps which, they claim, make livestock identification easier and safer.



"The farmer's future rests in the hands of research people. Only a steady stream of new products from the laboratories will keep farm producers competitive," said C. D. Siverd, general manager of **American Cyanamid Company's** Agricultural Division, at the opening of the Cyanamid Agricultural Center in West Windsor Township, New Jersey. The Research and Development Laboratory, shown above, is the largest building at the Center. It includes offices, laboratories, a large library, greenhouses, and air-conditioned livestock pens for close observation of domestic farm animals. Approximately one million dollars worth of laboratory equipment is installed at the center.

The Gyro 84 rotary cutter manufactured by **Servis Equipment Company** of Dallas, Texas, is shown above cutting, crimping, and windrowing Sudex hay. The Servis Gyro 84 may also be used as a stalk shredder by adding multiple intermeshing free-swinging blades. When using only two ½ x 5 inch blades, it is guaranteed to cut four inch diameter brush and trees without damage to the cutter or tractor.



A new stock tank heater for LP-Gas operation has been announced by **Brower Manufacturing Co.**, Quincy, Illinois. Featuring "light it, forget it" operation, the new heater keeps warm water before stock all winter with no further attention.

Brower's new tank heater produces 12,000 BTU, more than ample heat to keep water warm under all conditions, including coldest sub-zero weather. Special baffles slow the flow of heated air through the heat tube so that heat is transferred to the water instead of escaping through the exhaust pipe. This results in more than 90% overall fuel-saving efficiency.

Nearly 1,500 agricultural agents and their families gathered from 48 states for the 46th Annual Meeting of the National Association of County Agricultural Agents in New York during September. The main theme of the meeting was "Marketing in Action." Officers and directors of National Association of County Agricultural Agents for 1961-62 are from left —seated; Pres., B. H. Treiweiler, Wyo.; Vice-pres., Paul Barger, Ia.; Sec.-Treas., J. S. Thurston, Pa. Standing: directors, Stanley Hale, Conn.; Elmo Cook, Tex.; J. B. Turner, Ill.; George Jones, Col. (Not in photo, E. N. Stephens, Fla.)

Less than a year after introducing a 130-bushel flail type manure spreader, **New Idea** is adding this 160-bushel model to its line. Free-swinging steel flails mounted on a rotating shaft finely shreds manure and spreads it in a controlled, uniform pattern 80 to 90 inches wide. The exclusive flail design handles frozen dairy manure with ease, and spreads sloppy pen manure without build-up—even in sub-zero weather. The hooded, undershot action cylinder spreads manure low where wind can't carry it. New Idea now offers two flail spreaders—a 130-bushel model and this new 160-bushel machine.

Three highly prized Holstein-Friesian bulls leave the Seattle-Tacoma International Airport for Tokyo. The bulls, valued at $52,000, were purchased from the **Carnation Milk Farms**, Duvall, Washington, and will be used for breeding purposes at three Prefectural State Farms in Japan. From Tokyo the bulls were shipped to Mie, Fukuoka and Chiba Prefectures.

(Courtesy of JAPAN AIRLINES)

Two new "soft-tops" known as the Sport-Top (Coupe) and Sport-Top (Full) are now available for the Scout, **International's** all-purpose utility vehicle. The new Sport-Tops are made of white vinyl-faced cotton drill, just as on popular convertibles. They enclose the cab, or the full-length space from windshield to tailgate consisting of cab and payload area. Both are easily installed and removed and provide effective insulation against heat and cold and minimize road noises.

18TH NATIONAL RED POLL SALE

CARBONDALE, ILLINOIS
THURSDAY, NOV. 9, 1961

About 60 Head Selling as 55 Lots

Featuring the 1961 National Junior Champion Bull with a pre-weaning gain record of 2.3 plus birthweight, many other outstanding bulls and females. Included are major show winners, gain-tested cattle from carcass-evaluated bloodlines and milk production-tested bloodlines. Bulls, cows, bred heifers and open heifers. Some calves, both sexes, to sell at side of dams. Red Polls gain faster for more profit, produce the most quality red meat with least waste fat of any beef-producing breed of cattle. Ask for the performance facts on Red Poll Cattle.

Send For Free Literature And Catalog —Or Pick Up Your Copy Of The Catalog At The Sale.

Red Poll Cattle Club of America
3275-B Holdrege Street
Lincoln 3, Nebraska

You are invited to attend the Red Poll annual meeting and banquet, same location, on Wednesday, November 8.

Raise Thrifty, Money-Making

LANDRACE

Larger Litters—Faster Growth
Takes Less Feed
Test Proven Over Half A Century
For Free Information Write
American Landrace Assn.
Box 29 Noblesville, Ind.

CORRIEDALE SHEEP

top the market at an early age. They produce maximum amounts of top quality wool and lamb. Because of this you will have a greater cash return from Corriedales.

CORRIEDALE sheep are tops for high quality wool, are more productive and prolific, and will make you more money because of this productivity.

For Breeders List write:

American Corriedale Association, Inc.

Rollo E. Singleton, Sec'y
108 Parkhill Ave. Columbia, Missouri

PRACTICAL . . .

POLLED HEREFORDS

- Gain Tested and Performance Registered
- Extra Pounds of Beef Means More Profit
- Buy Your Herd Sire on Proven Facts
- To Insure Heavier Calves and Greater Profit
- No Nurse Cows—Never Had a Dwarf

For Sale: Any two of these three animals. Offered subject to prior sale. Particulars furnished upon request. (per August ad)

- 1. A.H.C. Mischief Domino 45th Double Standard Polled Hereford. 6 yrs. old, 2100 lbs., shown here.
- 2. A Son—R.W.J. Rollo Domino F43 born 12-14-[illegible] [illegible] wt. 1600 lbs. Nine of h[illegible] [illegible] SOLD [illegible] and aver[illegible] [illegible] 2.54 lbs. per day, no adjustments.
- 3. A Son of #1 born 10-7-60 which on pasture, creep feed and dam's milk weigh[illegible] 26[illegible] and grad[illegible] [illegible] lbs. per day. Out of cow sired by a 2300 lb. 5 star bull.

SOLD

Will sell #1—Price less than #2 & #3 sold for.

- Active member of P.R.I., American Hereford Assn. and American Polled Hereford Assn., Georgia Hereford Assn. and Florida Hereford Assn.

Visitors and Inquiries Welcome

R. W. JONES, JR. PHONE TR 4-4467
Box 157, Route 1 Leslie, Ga.

CHAROLAIS-CHARBRAY-CHAROLAIS-CROSS

J. P. Wagner, Owner — CR — Jim Ritter, Mgr.

BOX R RANCH Ash Flat, Ark.
TELEPHONE: HARDY 3783

ENGLISH LARGE BLACKS

English Large Black swine are in tremendous demand. Why? Those who once buy them buy more. Those who have heard about the extra profits they will make with the English Large Blacks as pure breds or for use in crossing are buying them. When you cross the English Large Black with a Landrace, Yorkshire or any good meat type boar, you will have the fastest growing pigs available today. Not only that, the pigs from this cross are larger at birth, larger at 8 weeks, are healthier and hardier, go to market earlier on less feed. Ask about our Package Deal, 2 Large Black gilts and 1 unrelated boar. Catalogue, Photos, Cross Breeding folder.

TWEEDLE FARMS

Fergus 1, Ontario, Canada

SUFFOLK SHEEP

Mean Increased Farm Profits

Suffolk ewes lamb easily and have a good supply of milk. This means your lambs will grow faster and market earlier—at a higher price.

For free information and breeder's list write

NATIONAL SUFFOLK SHEEP ASS'N
P.O. Box 342Z Columbia, Missouri

H. L. Hoffman & Sons Polled Hereford Dispersal

At farm 2 miles So. of Chesterfield, Indiana
Monday, November 20, 1961—11:00 A.M.

130 HEAD—**12 Bulls,** including 2 herd bulls.
80 Females, including cows with spring and fall calves, bred and open heifers.
MANY OF THE SPRING HEIFER CALVES WILL MAKE OUTSTANDING 4-H PROJECTS.
TB and Bangs Tested—Many Calfhood Vacc.

Write for catalog: **H. L. Hoffman & Sons**
R. 1, Anderson, Indiana

If you are in the Sheep Business to make money, switch to Rambouillets

Rambouillets produce more pounds of better quality lambs, thriftier feeder lambs, more pounds of better quality wool, and better ewe lambs for replacements. This means **More Net Income.**

For Information Write American Rambouillet Sheep Breeders Ass'n
2709 Sherwood Way — San Angelo, Texas

More Profits with Market Topping HAMPSHIRES

✓Better Mothers ✓Cheaper Gains ✓MORE Meat

Raise Hampshires to get that extra pig per litter; more pounds of consumer approved red meat per head; and higher dollar value of carcass. Profit by maximum prolificacy, motherly instinct, rapid growth, economy of gain, foraging ability, and well muscled carcass quality. Count the belts on farms and markets for proof of farmer preference. Hampshires consistently weigh, grade and cut better than estimated. You can buy Hampshires that are Certified as superior meat hogs. Write for literature about this leading breed and its Certified Meat Hog Program.

SPECIAL

Send $2.00 for one year subscription to Hampshire Herdsman, breed magazine. Keep informed on meat hog production, selection, and improvement.

HAMPSHIRE SWINE REGISTRY

Dept. BG, 1111 Main St., Peoria, Ill.

RED POLLS for STEADY PROFIT

Red Polls wean nearly one-fifth more calf, by weight, per cow in cow and calf herds. That's up to 100 lbs. more calf to sell, and more profit. Write For Free Literature

Red Poll Cattle Club of America
3275-B Holdrege St., Lincoln 3, Neb.

CHAROLAIS
★ The Silver Cattle With A Golden Future

CHAROLAIS
★ The Largest Cattle on Earth . . .

You'll Enjoy

THE CHAROLAIS REVIEW

1 year	(12 issues)	$ 4.00
2 years	(24 issues)	7.00
3 years	(36 issues)	10.00
5 years	(60 issues)	15.00

Sample copy, 50c coins and four 4-cent stamps.

THE CHAROLAIS REVIEW
305 So. 16th St. Ord, Nebraska

The Swing Is To YORKSHIRES Because of larger litters, better feed conversion, adaptability to confinement and market-topping ability. For complete information write: 1001 South St., Lafayette, Ind.

AMERICAN YORKSHIRE CLUB

FREE FACTS

How to Succeed In Today's Dairying with

REGISTERED GUERNSEYS

Get all the facts and you'll find out why... adaptable, easy-to-handle, efficient Registered Guernseys are your best choice for highest net income in modern dairying.

THE AMERICAN GUERNSEY CATTLE CLUB
21 Main Street, Peterborough, N. H.

Send FREE information on how to . . .
☐ Start a Guernsey herd and where to buy breeding stock. ☐ Add profits producing and selling nationally-advertised Golden Guernsey Milk.

Name _____

Address _____

Town _____ State _____

SOUTHWEST MISSOURI

POLLED HEREFORD BREEDERS'

SHOW and SALE

October 26

Bolivar, Missouri

Roberts Sale Barn

2 miles east of Bolivar on Hiway 32

Show 10:00 — Judge: Joe O'Bryan

Sale 1:00 — Auctioneer: Jewett Fulkerson

45 Lots

20 Bulls—Calves to proven herd sires

25 Females—Calves to cows with calf

Health papers furnished.

Write Glenn Westfall for catalogs.

ANGUS CATTLE AND CHEVIOT SHEEP OF SIZE AND QUALITY

See our heifer calves in the Record of Performance SALE AT CULPEPER, VIRGINIA, NOVEMBER 16.

Come to see us.

Charles W. Wampler & Sons
HARRISONBURG, VIRGINIA

FOR: Charolaise • Charbray • Charford CATTLE, Write

ZINALA FARMS
Route 1, Loami, Illinois

WYE PLANTATION

FOR SALE: Performance Tested Angus Bulls. Large, heavy, fast growing of Scotch breeding. Advanced Register Records.
Frozen Semen from our Imported Scotch and P. R. I. progeny proven herd sires.
Folders with data and prices on request.
Address: James B. Lingle, Manager
(Telephone: TAylor 7-2041)

WYE PLANTATION, *Queenstown, Md.*

YOUR PONY Magazine Published Monthly . . . largest and most complete pony publication printed covering all breeds. National Scope . . . $3.75 per year U.S.; $4.00 Canada and Foreign. BOX 125, BARABOO, WISC.

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, JULY 2, 1946 AND JUNE 11, 1960 (74 STAT. 208) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF

AMERICAN LIVESTOCK JOURNAL, published monthly at Columbia, Missouri, for September, 1961.

Publisher, Breeders Gazette Publishing Company, 200 South 7th Street, Columbia, Mo. Editor, Samuel B. Guard, 220 Livestock Exchange, Louisville, Ky. Managing editor, None. Business manager, None.

The owner is: Breezers Gazette Publishing Company, 200 South Seventh Street, Columbia, Mo. Stockholders are: American Press, Inc., 200 South Seventh Street, Columbia, Mo., Guard Publishing Company, Inc., 220 Livestock Exchange, Louisville, Ky.

Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required by the act of June 11, 1960 to be included in all statements regardless of frequency of issue.) 160,043.

BREEDERS GAZETTE PUBLISHING COMPANY
By WILLIAM W. BECKETT, President

Sworn to and subscribed before me this 26th day of September, 1961.

(Seal) MARY L. SEBASTIAN, Notary Public
(My commission expires September 9, 1963.)

WHO SAID YOU CAN'T?

The hardest thing on a farm, I think,
Is trying to teach a calf to drink.
You pull and haul, get his head in pail;
He'll stand there and twist and wiggle his tail;
And the very first thing, kerplunk! goes his nose,
And most of the milk goes over your clothes.
Hang onto your patience, your teeth you may grit;
If you can't hold your temper, you might as well quit.
For Old Mother Nature whose methods don't fail.
Never meant for a calf to drink out of a pail.
Back him into a corner, straddle his neck,
He won't damage you much, you're already a wreck.
Just give him a finger, and maybe with luck
That little old calf will start in to suck.
Pick up your bucket and push his head down.
Then away you go again, around and around.
Just do this a week with your back in a kink,
And maybe by then you'll teach him to drink!

DOSAGE CHART AVAILABLE

■ Information about important diseases in cattle, swine, sheep and goats, including causes and chief symptoms, suggested treatment and prevention is graphically itemized in a new wall chart just published by Merck Chemical Division.

When opened to the 18- by 28-inch inside page, three columns describe: (1) disease cause—how spread; (2) symptoms—diagnostic aids, and (3) treatment-control. Merck animal health products are illustrated and described on a half-page in the folder, and practical on-farm application of these products is itemized in the "treatment-control" section.

The chart describes 15 economically important diseases of cattle, six for swine and six for sheep.

Merck's newest chart is designed for easy mounting on office or stable walls for ready reference. Footnotes give indications also for blackleg, sweet clover poisoning, anthrax, shipping fever, and malignant edema, as well as age of animals affected, and diagnostic aids. Another reference note describes treatment of superficial or deep wounds, and procedures for emergency tapping in cases of bloat. Chart copies may be obtained by writing Merck Chemical Division, Agricultural Products, Rahway, N. J. ◄

3 Out of 4 Are White-Faces

Herefords, or cattle carrying a predominance of Hereford blood, make up about three-fourths of the beef cattle of this country, declared Paul Swaffar, secretary of the American Hereford Association, Kansas City. The occasion was toting up the total Hereford registrations during the 1961 fiscal year, up to Sept. 1st. 476,367 purebred Herefords were registered, a slight increase over the 475,843 which our annual Purebred Review shows to have received pedigrees in 1960. The Hereford Association has 40,143 members listed having issued 1,168 lifetime memberships and 345 juniors this past year.

President Earl Monahan, Hyannis, Neb., reports: "Our field staff is constantly besieged by requests for commercial females. This is one of the most accurate barometers of breed popularity and ability to make money for its owners. The opportunities in the future for the commercial man are good; and so long as he is in good shape, the registered breeder has two things of an immediate nature facing him: (1) he must continue to improve his cattle; and (2) he must support his operation with an intensive promotion program in his own area. An active market is indicated when I tell you that 279,923 registered Herefords changed ownership."

With the introduction of the newest IBM Data Processing Unit into Association procedures, all registration certificates now issued from headquarters carry a three-generation pedigree on the face of the certificate. Applications for registration are processed during this year at a rate of about 4 a minute, or 1,900 per working day.

CLASSIFIED advertisements | BUY-SELL-EXCHANGE

EVERYTHING FOR THE LIVESTOCKMAN

RATES 60¢ PER WORD, PAYMENT IN ADVANCE. MINIMUM AD 20 WORDS. SEND PAYMENT AND ORDER BY 5th OF MONTH FOR PUBLICATION IN NEXT ISSUE, TO AMERICAN LIVESTOCK JOURNAL, 200 S. SEVENTH ST. ★ COLUMBIA ★ MISSOURI

AGENTS WANTED

Run a spare-time Greeting Card and Gift Shop at home. Show friends samples of our new 1961 Christmas and All Occasion Greeting Cards and Gifts. Take their orders and earn to 100% profit. No experience necessary. Costs nothing to try. Write today for samples on approval. Regal Greetings, Dept. 18, Ferndale, Michigan.

Sensational new longer-burning Light Bulb. Amazing Free Replacement Guarantee—never again buy light bulbs. No competition. Multi-million dollar market yours alone. Make small fortune even spare time. Incredibly quick sales. Free sales kit. Merlite (Bulb Div.), 114 E. 32nd, Dept. C-74K, New York 16, N. Y.

AUCTIONEERS

LEARN AUCTIONEERING! Free catalog. MISSOURI AUCTION SCHOOL, 1330 Linwood, Kansas City 9-X62, Missouri.

BE AN AUCTIONEER. Term soon. Write for free catalog. Home Study Course available. Reppert School of Auctioneering, Decatur, Indiana, Box 3. Founded 1921. G. I. Training approved.

LEARN AUCTIONEERING, 23 Years largest in the world. Term Soon. Free Catalog. Reisch Auction School, Mason City, Iowa.

BUSINESS OPPORTUNITIES

MAKE BIG MONEY raising rabbits, cavies, Chinchillas or mink for us. Free information. Keeney Brothers, New Freedom, Penna.

CATTLE

FOR SALE—WISCONSIN'S HIGH PRODUCTION and top quality Holstein and Guernsey dairy cows and heifers due to freshen soon. Also younger heifers and heifer calves—all ages. Will deliver any size order by truck to your farm, subject to your inspection. Ross Blott, P.O. Box 158, Mukwonago, Wisconsin.

SPRING RIVER FARM for quality Registered Angus bulls. Also beautiful heifers. C. Geimer, Burr Oak, Michigan.

HOLSTEIN HEIFER CALVES. Excellent quality. Shipped subject to inspection and approval. Write or telephone for prices. Walter McFarland, Watertown, Wisconsin. Telephone 840.

WISCONSIN'S FINEST Holstein and Guernsey dairy calves shipped to you on approval. Write for free price list. Otto Vanderburg, North Prairie, Wisconsin.

RED POLLS, Gain tested. Young bulls, heifers. Highland View Ranch, Harrison, Arkansas.

PUREBRED CHAROLAIS: Compare our quality and prices. Bill Lamme, Laclede (69), Missouri.

Charolais and Charbray breeding stock for sale. B & R Cattle Co., Keota, Okla.

CATTLE MARKERS

Cattle Eartags legible 50 ft., Chains, Nylon Rope Sets, Anklets. Samples. Nearest Dealer. Bock's Supplies, Mattoon, Illinois.

HOGS

SPF disease free rugged Duroc boars and gilts. Nebraska's oldest herd famous for large litters, fast gains and thick meaty carcasses. Officially certified. Waldo Farms, DeWitt, Nebraska.

HORSES

"HOW TO TRAIN HORSES"—A book everyone who likes horses should have. FREE. No obligation. Simply address Beery School of Horsemanship, Dept. 210, Pleasant Hill, Ohio.

OF INTEREST TO WOMEN

$2.50 HOURLY possible sewing aprons at home for merchants. Materials supplied to you without cost. Write Jiffy Manufacturing, Lake Village 55, Arkansas.

HOME TYPING: $65 week possible! Details, $1. Simon, 709 Webster, New Rochelle, BG-9, N. Y.

YOUR CHURCH OR GROUP can raise $50.00 and more, easy and fast. Have 10 members each sell only ten $1.25 cans my famous Special Grind Pure Black Pepper. Keep $50 for your treasury. No money needed. Write Anna Elizabeth Wade, Dept. 59BT, Lynchburg, Va.

LIVESTOCK

HOLSTEIN STEERS—HOLSTEIN HEIFERS. Uniform loads. Best quality. From 250 pounds up. Wholesale prices. Ed Howey, 306 Exchange Bldg., South St. Paul, Minn.

MISCELLANEOUS

BUCKSKIN JACKETS, Gloves, Moccasins, etc. Deerskins tanned. Send 50c for Buckskin money poke and big illustrated catalog. Berman, Buckskin Co., Mples. 1, Minn. Dept. 30.

INVENTIONS WANTED for immediate promotion! Patented, unpatented. Outright cash; royalties! All types considered. Casco, Dept. 6, Mills Building, Washington 6, D. C.

LONESOME? Join Florida's unique introduction service. Write for free particulars; confidential. Tropic Club, Box 4747 EC, Miami Beach 41, Fla.

PHOTOGRAPHS

KODA-COLOR SPECIALS FROM COLOR SPECIALISTS! With this advertisement, Rolls: 8 prints guaranteed $2.00; 12 prints guaranteed $2.00. REPRINTS 15c each. 5 x 7 enlargements 2 for $1.00; 8 x 10 $2.00 each. Fast service. FREE mailers. Eli Photo, Box 1873-C, New Haven, Conn.

REAL ESTATE

CANADIAN FARM LANDS—New and improved land in productive soil areas. Reasonably priced. Good settlement opportunities. Free information from Canadian National Railways, Room B100, Union Station, Winnipeg 1, Canada.

355 Acres on Myatt River, all fenced and cross-fenced. 275 Acres cultivation including 100 acres bottom. 5 Room modern house, one small tenant house, 2 miles blacktop, school bus, mail route. Price $30,000. OZARK REAL ESTATE CO., ROY ORR, REALTOR, HARDY, ARKANSAS.

ROTARY CUTTERS

ROTARY CUTTERS AND SHREDDERS:—Cheaper than you ever dreamed possible! Absolutely guaranteed to Please YOU. If you're not completely satisfied—WE PAY for the trial. Free literature. Corsicana Grader and Machine Company, Box 1320-K, Corsicana, Texas.

SHEEP

MAKE MONEY WITH SHEEP. Sheep Magazine—monthly—Send $2.00 for 1 year. Sheep Breeder and Sheepman, Box 86B, Columbia, Missouri.

STOCKMEN'S SUPPLIES

BREEDERS' CATALOG. Lists world's most complete line of scientific farming and livestock supplies. Write Nasco, Fort Atkinson, Wisconsin.

TRACTOR HITCH

LOOK—New tractor hitch—Heberlein 3 Point or 2 Point fast hitch now at new low prices; most advanced heavy-duty in the industry for IHC, John Deere, Oliver, Massey, Moline. Use any 3 or 2 Point matchine with older model tractors. Satisfaction guaranteed. Shipped freight prepaid. Write Bridgeport Equipment Co., Bridgeport, Nebraska.

VETERINARY SUPPLIES

Free 92-Page Handbook—Catalog, Livestock Diseases. Save money. Complete list vaccines, drugs, instruments. Kansas City Vaccine Co., Dept. 26, Kansas City, Missouri.

FREE VETERINARY CATALOG. Save 20-50% on all drugs, vaccines, chemicals, instruments. National, Box 6305-B, Minneapolis 23, Minnesota.

LATEST VETERINARY MEDICAL GUIDE BY VETERINARIAN describes diseases, conditions, 25c refundable with order. Save dollars ARF (R), farm-proved Drugs, Vaccines, Instruments. American Research Farms, EG, Lenexa, Kansas.

SUBSCRIBE NOW TO

THE AMERICAN LIVESTOCK JOURNAL

1 year .....$1.00 5 years $3.00

3 years .....$2.00 9 years $5.00

TO: THE AMERICAN LIVESTOCK JOURNAL 661
200 South 7th Street
Columbia, Missouri

Enclosed find my check for $..... to cover ..... years subscription. Please start mailing to me now at the address shown below:

NAME .....

ROUTE ..... BOX.....

TOWN ..... STATE.....

Sam Guard's Roundup

Guernsey Cow Coin

October Blessing

PUT IT IN THESE HORNY HANDS as in our herdsman hearts, oh Lord, to be careful, very careful, with this harvest. Hay's in mow, oats in bin, silage well tramped, rye cover springs green as shucks retreat to disclose new feed grain, plenty and to spare. Spring calves weaned well and the cream cans are heavier. That old sow farrowed 'leven again and saved them all. The bred ewes glean contentedly. And we, bomb-startled, flee to the Good Shepherd, too. That sheet-iron rooster on the barn heads northward, mostly. Hunter's moon fills with reflected light as our souls fill with gladness, reflected, too. Oh, we thank Thee, Giver of all. Make us worthy of Thy bounty, and brother's keeper. The autumnal glory is Thine, and mercy on earth as in Heaven. Amen.

---

little creator

YOU CONCRETE A FEEDLOT. You build a fence. You put up a silo. You drain a slough. You lime a weed patch and seed alfalfa. You get calves by a performance-tested bull out of your plain cows. Say now, talk about the creative power of man's mind and spirit! Those things weren't there yesterday, or last month, or last year. But now look: new wealth, more assets, accented production in balance of things folks need. Your know-how, your planning and your work did it. You've a right to feel pretty good about it. I tell you.

For a Centennial Commission

PRESIDENT KENNEDY has issued a proclamation designating the year 1962 as United States Department of Agriculture Centennial year. Good. On May 15, 1862, President LINCOLN signed the legislation creating the Department. Then on July 2, 1862, "Honest Abe" signed the Morrill Act which gave us our land-grant colleges. In a hundred years the American farmer has learned how to provision five wars for victory and to feed 25 other people besides himself. The Centennial Year finds this nation confused, if not divided, as to a proper national policy on agriculture. What about the family farm in the next century? We suggest that the President cap the climax of the 1962 Centennial, by appointing the Second Commission on Country Life. Such a non-partisan, truth-seeking body could do for us in the second half of the 20th century what President THEODORE ROOSEVELT'S Commission accomplished in the first half.

Cow Coin

LITTLE GUERNSEY ISLAND, 7 miles long and 3 miles wide, belongs to Great Britain. But the States of Guernsey make their own laws, coin their own money. MR. AND MRS. HERBERT MARTEL, whose 10 cows I found tethered on an acre and a half of rye grass and clover up to their knees, gave me a three-pence piece. Here it is, with a low-relief of a Guernsey cow on the obverse side to substantiate its value. We have no one national cow, but it might be a good idea to create a composite one for one of our coins. Penny, or half-dollar?

Better Farming Localized

MICHIGAN HAS JUST completed a 5-year experiment with **township** extension agents. They expanded the county agent's work right down to every farm, township by township, and followed through on management and family farm income. Maybe that's the way; maybe not. Anyhow you might like to write Dept. of Agriculture Economics, Michigan State University, East Lansing, Mich., for a copy of Technical Bulletin 284, by JAMES NIELSON. Seems to me to fit right in with the expansion of the Farmers' Home Administration loans in the Agricultural Act of 1961. If credit for building up the little family farm cannot be had at your bank or P.C.A., it may be had from F.H.A. at 5%.

Columbia, Mo.— Louisville, Ky.

FRIENDS, IT IS APPARENT, I trust, from the September issue and now from this October number which is a little late, too, on account of the transfer, that I have again undertaken the complete editorial responsibility for this old livestock journal. Breeder's Gazette Publishing Company has acquired full title and ownership of this publication. The business office is established at 200 S. 7th St., Columbia, Mo. The editorial office is here with me at the old stockyards in Louisville, Ky. In order to make a constantly improving work paper, at once helpful and inspirational to every one of our 160,000 subscribing families, I need your help. While we keep up with the practical technology of stockfarming, I want more'n anything to record what **you** are thinking and doing with your herd and flock in your own feedlot and pasture, what you're talking about at the supper table. Write me, won't you?

Thanks,

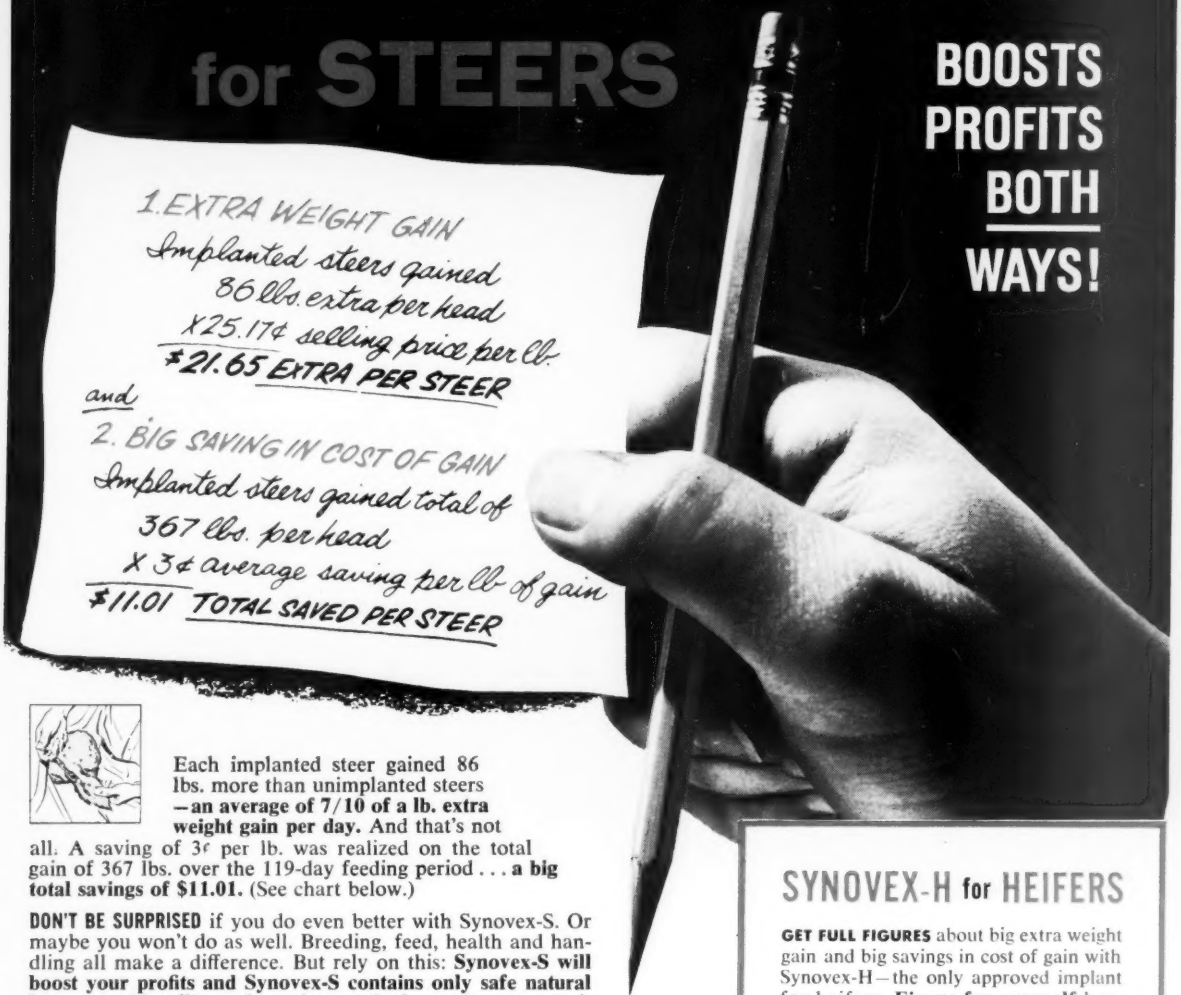
Samuel R. Guard

220 Livestock Exchange
Louisville 6, Ky.

Figure for yourself how

SYNOVEX-S for STEERS

BOOSTS PROFITS BOTH WAYS!


1. EXTRA WEIGHT GAIN
Implanted steers gained
86 lbs. extra per head
X 25.17¢ selling price per lb.
$21.65 EXTRA PER STEER
and
2. BIG SAVING IN COST OF GAIN
Implanted steers gained total of
367 lbs. per head
X 3¢ average saving per lb of gain
$11.01 TOTAL SAVED PER STEER

Each implanted steer gained 86 lbs. more than unimplanted steers **—an average of 7/10 of a lb. extra weight gain per day.** And that's not all. A saving of 3¢ per lb. was realized on the total gain of 367 lbs. over the 119-day feeding period . . . **a big total savings of $11.01.** (See chart below.)

DON'T BE SURPRISED if you do even better with Synovex-S. Or maybe you won't do as well. Breeding, feed, health and handling all make a difference. But rely on this: **Synovex-S will boost your profits and Synovex-S contains only safe natural hormones.** No stilbestrol or other synthetics, no hormone residues in meat after slaughter, no downgrading of carcass quality.

DON'T BE MISLED by so-called "economy" implants. Synovex-S pays off when it counts—when you sell your steers. Why not prove it with your next group of feeders going through?

SYNOVEX®
S for STEERS
H for HEIFERS

BASIC DATA, steers implanted with Synovex-S (all figures average per head)

Number of tests	5, various areas U.S.A.
Number of steers	234
Days on feed	119
Extra gain	86 lbs.
Total gain	367 lbs.
Saving/lb. of gain	3¢
This gain translated to current market:	
Selling price	25.17¢
(Choice, Chicago Market, average, 4/15-30/61)	

SYNOVEX® is a Squibb trademark

SQUIBB DIVISION Olin N.Y.

SQUIBB – A NAME YOU CAN TRUST

SYNOVEX-H for HEIFERS

GET FULL FIGURES about big extra weight gain and big savings in cost of gain with Synovex-H—the only approved implant for heifers. **Figure for yourself** how Synovex-H boosts profits **both ways.**

FREE SYNOVEX-H "FIGURE FOR YOURSELF" SHEET, PLUS "QUESTION & ANSWER" BOOKLET ABOUT SYNOVEX-S and H. Write SQUIBB, *Veterinary Department,* 745 Fifth Avenue, New York 22, N. Y.

Name _____

Address _____

City _____ Zone ____

State _____

HOW TO RAISE MORE QUALITY CALVES

Increase your chances of a bigger calf crop and growthy market calves. Follow this Coordinated Feed-Health Program with Aureomycin® in formula feeds, and Cyanamid vaccines

Dollar returns from a cow-calf operation depend on a program geared to keep disease out of the herd—*before* calving and all through the calf-growing period.

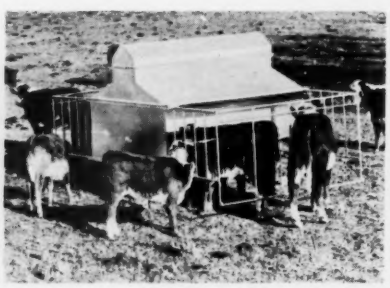
This means following good management and sanitation practices. It means proper feeding at all stages of production. It means checking with your veterinarian—regularly. It means maintaining a routine vaccination schedule to meet disease problems in your area. It means seeking the advice of your agricultural college, extension agent or service man. Such a step-by-step program is practical, sound—and it *pays off*.

When you follow the Cyanamid Feed-Health Program described here you take the systematic steps needed to knock out disease. Ask for the special folder that describes, in detail, the feed-health program for a cow-calf operation, or write direct to: American Cyanamid Company, Agricultural Division, Princeton, N. J. ®*AUREOMYCIN is American Cyanamid Company's trademark for chlortetracycline.*

1. How to get more strong, healthy calves. Feed range cubes containing AUREOMYCIN to wintering cows. Cows stay healthier, are able to drop sturdy calves. Vaccinate with CARBOZOO® for anthrax; with LEBAC® for leptospirosis.

2. Better maintenance for wintering calves and yearlings. Feed range cubes that provide 70 mg. of AUREOMYCIN per head per day. Calves resist stresses, stay healthy and put on more growth. Your replacement heifers develop soundly.

3. Keep stock thriving in spring and summer. Feed a pasture supplement that supplies 70 mg. of AUREOMYCIN to prevent foot rot. To prevent anaplasmosis, provide a feed that supplies 0.5 mg. of AUREOMYCIN per pound of body weight daily.



4. Creep feed Aureomycin for low-cost gains. At four weeks of age, put calves on creep feeds that provide 70 mg. of AUREOMYCIN per head per day. This gives calves stamina to resist disease, helps prevent scours and foot rot, protects calves through stresses.

5. Vaccinate to prevent these costly diseases. To prevent blackleg, malignant edema and shipping fever, vaccinate calves with TRI-BAC® at 4 to 6 months of age; with CARBOZOO to prevent anthrax; with LEBAC to prevent leptospirosis.

6. Market more quality calves. When you follow the Cyanamid Feed-Health Program outlined here, your cow-calf operation benefits all the way. You'll send more top-quality animals to market—maintain your reputation as a raiser of good-doing calves.

The label instructions on Cyanamid products, and on products containing Cyanamid ingredients, are the result of years of research and have been accepted by Federal and/or State Governments. Always read the labels and carefully follow directions for use.

CYANAMID

COORDINATED FEED-HEALTH PROGRAM

CYANAMID SERVES THE MAN WHO MAKES A BUSINESS OF AGRICULTURE